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ABSTRACT

The Governor's Advisory Council on Literacy proposed 3 major recommendations supported by 30 specific action plans for Missouri. The recommendations are as follows: Missouri should guarantee the opportunity for all children to be prepared for their school years; Missouri should focus on keeping students in school and ensuring that their education prepares them for their adult years; and Missouri should provide opportunities for all adults, especially those who are underskilled, to improve their literacy skills, life skills, and job skills. Some of the action steps listed include prenatal care; full implementation of Head Start; support for employer-involved child-care centers; detection of learning disabilities and basic-skills deficiencies as part of the required teacher-education curriculum; a 12th-grade competency test that would lead to special certification on high school diplomas; state incentives for companies to upgrade existing employee basic skills; and increased funding for libraries. (One table and four figures are included in the report. A 35-item list of works cited is provided.) (CML)

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The Coming Crisis for Missouri's Workforce

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Southwestern Bell Telephone Company

The Council salutes Southwestern Bell and its employees for their leadership on the literacy issue. We acknowledge the foundation's generous gift to underwrite this report. Following is a brief description of Southwestern Bell's commitment to literacy in Missouri.

Nearly three years ago Southwestern Bell Telephone Company decided to place literacy right at the top of its agenda.

The company launched a far-reaching initiative to invest in programs aimed at reducing illiteracy and spearheaded a statewide campaign to call attention to the issue.

In addition, the telecommunications firm actively recruited volunteer tutors from its 8,100 employees in Missouri to teach others to read.

One of its first steps was to announce a $250,000 grant from the Southwestern Bell Foundation to provide seed money for a new statewide organization called, Literacy Investment For Tomorrow (LIFT).

On the heels of that announcement, the company produced and paid for advertising to urge citizens and corporations to join in the battle against illiteracy.

Advertisements appeared in newspapers and on radio throughout Missouri. The company also carried the message to its 1.9 million customers through bill inserts and on the back of directory covers.

At the grassroots level, the company has forged partnerships with schools, colleges, literacy groups and others to develop local solutions to stem the tide of illiteracy.

At the urging of the company's Missouri Division president Randy Barron, employees have often led the way in organizing and championing these literacy efforts in communities throughout the state.

JOBS WITHOUT PEOPLE

The Coming Crisis for Missouri's Workforce

Executive Summary

Final Report
Governor's Advisory Council on Literacy
October 1989

John Ashcroft
Missouri Governor
Roy Blunt, Chairman
Missouri Secretary of State
Robert Bartman, Vice-Chairman
Missouri Commissioner of Education

Literacy Investment for Tomorrow Missouri (LIFT-MO)

Literacy Investment For Tomorrow Missouri (LIFT-Missouri) was created to be a force for change! Evolving in 1988 from The Governor's Advisory Council on Literacy, LIFT-Missouri is a private, not-for-profit organization formed to help increase the literacy level of the current and future Missouri workforce.

LIFT-Missouri has three goals:

- Linking existing resources for literacy and creating a statewide clearinghouse.
- Increasing public awareness of literacy and its effect on the economy and the quality of life in Missouri.
- Providing technical assistance and funding to exemplary and innovative local literacy programs.

The clearinghouse for literacy information and research will gather and diseminate information on literacy from both Missouri and natural sources. It will develop and maintain data on the impact of illiteracy on the state's economy, businesses and government. Local and statewide awareness activities designed to attract the attention of potential students and tutors will guide them toward appropriate local literacy programs. LIFT-Missouri will make a strong effort to encourage new and innovative approaches to literacy skills training and foster research projects designed to improve the quality of training available to both students and tutors in the adult Missouri literacy movement. LIFT-Missouri will enhance exemplary local programs by providing financial support, helping recruit volunteers and encouraging citizen involvement in promoting literacy efforts.

Meeting the goals of LIFT-Missouri must involve professional and volunteer participation and must have the support of civic and business leadership across the state. The success of LIFT-Missouri will be measured by the impact it has on increasing the number of Missourians who have the basic skills required to function successfully in the workplace and the community.

Diana Schmidt, Executive Director
LIFT-MO
300 S. Broadway
St. Louis, Missouri 63102
800-729-4443

THE COUNCIL AND COUNCIL MEMBERS

The Governor's Advisory Council on Literacy is a direct result of a recommendation by The Missouri Opportunity 2000 Commission.

The 2000 Commission, co-chaired by Secretary of State Roy Blunt and the former Mayor of St. Louis, John Poelker, was charged with studying the future economic development and employment opportunities that would exist for Missourians between the end of the eighties and the year 2000. To that end, the Commission made 55 recommendations; recommendation number 22 proposed that Missouri make a "massive statewide effort to eliminate illiteracy."

Following the 2000 Commission's recommendation, Governor John Ashcroft established The Governor's Advisory Council on Literacy in early 1988. He asked Secretary of State Roy Blunt to chair the Council. Missouri Commissioner of Education, Robert Bartman, was asked to serve as the vice-chairman. The council is comprised of 52 volunteer members from business, labor, education, government, agriculture, foundations, and the media.

The council was given a two year time period to evaluate the effectiveness of current literacy efforts within the state, identify gaps in service and recommend corrective action. The council divided into five committees: Literacy Assessment and Evaluation; Literacy for School-Aged Missourians; Literacy Enhancement for Missouri's Workers; Literacy Skills for At-Risk Missourians; and Support and Reinforcement for Literacy Skills.

During the summer of 1988, five public hearings were held around the state. The committees also held several working sessions, commissioned reports, conducted surveys, and gathered research materials. Then each committee produced a report. These five reports formed a draft of an interim report. The council's executive committee (the council's chair and vice chair and the chairs and vice-chairs of each committee) reviewed the draft which resulted in the publication of the Interim Report in April of 1989.

During the summer of 1989, five more public hearings were held to allow Missourians to comment on the Interim Report. The council wanted its work to be inclusive so that every individual and group which had a stake in Missouri's illiteracy problem had the opportunity to have input. With both rounds of hearings, the council heard from over 400 individuals; almost 400 more attended the meetings as interested listeners. Additionally, many people and organizations responded to the council's work through the mail and over the telephone.

Based on the responses from the Interim Report, a draft of the final report was produced. On September 6, 1989, the full council met to review that draft. The council made a few changes and then approved the publication of this document, The Final Report of the Governor's Advisory Council on Literacy.

Secretary of State Blunt and Commissioner of Education Bartman are grateful to the Council members for volunteering their time, expertise, and resources.

COUNCIL MEMBERS

Bruce Anderson serves as the Vice-President of The Danforth Foundation in St. Louis. He is a board member of Literacy Investment for Tomorrow-Missouri (LIFT-MO).

Jerald Andrews is Senior-Vice President for University Advancement, Southwest Baptist University in Bolivar. He is also President of Region 10, the Missouri School Board Association.

Dr. Robert Bartman became Missouri's Commissioner of Education in 1987. Bartman directs the Department of Elementary and Secondary Education. He is a board member of LIFT-MO.

Robert Bell is President and Chief Executive Office of Robert E. Bell and Associates. He is Chairman of the St. Louis City Private Industry council and a board member of LIFT-MO.

Roseann Bentley is President of the National Association of State Boards of Education (NASBE). A Springfield resident, she is a member of the Missouri State Board of Education.

Roy Blunt was elected Missouri's 32nd Secretary of State in 1984 and re-elected in 1988. He served as Co-Chairman of the Missouri Opportunity 2000 Commission, member of the NASBE Task Force on Early Childhood Education, and a board member of LIFT-MO.

Marion Cairns is the State Representative from the 97th District. She is a member of the House Committee on Elementary and Secondary Education, and a member of the Missouri Children's Services Commission. Cairns lives in Webster Groves.

Ray Canady is Vice-President of Marketing for Silver Dollar City, Inc., a privately-held company with theme parks in Branson as well as Tennessee, Georgia, and Oklahoma.

John Carlson is the Industrial Relations Manager for Zenith Electronics in Springfield.

Jan Cole serves as the Assistant Principal for Willard High School. She is the former Director of the Literacy Connection in Springfield.

Michael Crawford is the Chancellor of St. Louis Community College. He serves as the chair of the President's Academy of the American Association of Community and Junior Colleges.

Walter Diggs serves as Vice-President for Civic Affairs, McDonnell Douglas Corporation. He is a board member for LIFT-MO and the St. Louis Regional Commerce and Growth Association.

David Doctorian is a State Senator from the 28th District. He is a member of the Senate Appropriations Committee and Senate Education Committee. Doctorian is from Macon.

Mae Duggan serves as the Executive Director of the Thomas J. White Educational Foundation in St. Louis. In 1984, President Reagan appointed her to the National Advisory Council on Adult Education.

Dorothy Sanborn Elliott is Director of the River Bluffs Regional Library in St. Joseph. She is the immediate past President of the Missouri Library Association.

Michael Hartman is the Director of the Missouri Division of Job Development and Training. The agency is involved with training programs designed to alleviate specific employment problems of economically disadvantaged adults and youth.

Dr. R. Ray Henry is the former President of Jefferson College in Hillsboro. He has been a superintendent, principal, and teacher in Missouri high schools.

Monteria Hightower is Missouri's State Librarian and Associate Commissioner for Libraries, Coordinating Board for Higher Education.

Elsie Isensee Hill is President of the Springfield Area Literacy Council. She is also on the Board of Trustees, Laubach Literacy International.

E. Gene Howes is Director of Adult Basic Education at the Kirksville Area Learning Center. He serves as the Secretary of the LIFT-MO Board.

Dr. Dean Hubbard is President of Northwest Missouri State University in Maryville.

Jerry Hunter has been the Director of the Missouri Department of Labor and Industrial Relations since 1986. Hunter has been nominated by President Bush to be a member of the National Labor Relations Board.

Robert Hyland is Senior Vice-President for CBS Radio. From St. Louis, he is founder of the Hyland Center for the treatment of alcoholism within the St. Anthony's medical complex.

Chuck James is manager of Minority and Urban Affairs for Kansas City Power and Light. He is Vice-President, Board of Trustees for the Metropolitan Community Colleges and a board member of LIFT-MO.

W. Randall Jennings is District Sales manager for Apple Computer, Inc., in St. Louis. He is a board member of LIFT-MO.

Michael Jensen is Editor of *The Sikeston Democrat Advertiser*. He has served as the President of the Southeast Missouri Press Association.

Robert Kelley is the President of the St. Louis Labor Council, a position he has held since 1978. He is an Executive Board member of the Missouri State Labor Council.

Sandra Kauffman is a State Representative for the 46th District. She is a member, Appropriations Committee for Education and Transportation and the Higher Education Committee. Kauffman is from Kansas City.

John Kuttler is a farmer from Trenton. He is Chairman of the Private Industry Council of Service Delivery Area One.

Tom Lasley serves as Director, Marketing Services for *The Springfield News Leader*. He is active in the Springfield Area Chamber of Commerce.

Elvin Long is Director of Adult Education, Department of Elementary and Secondary Education. He is a former superintendent and teacher of Missouri schools.

David McMahon is an attorney with the Missouri Bar Association. From St. Louis, he serves as a board member for LIFT-MO.

Daniel "Duke" McVey is President of the Missouri State Labor Council, AFL-CIO. He serves on the Missouri Distressed Industry Task Force and Jobs for Missouri Graduates.

William Mann serves as Chancellor, Metropolitan Community Colleges in Kansas City. He was appointed by the Governor to serve on the Job Training and Coordinating Council for Missouri.

Alton Manning is the University Ombudsman, Southwest Missouri State University. He is the former director of Pupil and Community Services for the Springfield Public School System.

Marguerite Martinez is the coordinator of Bilingual Services for the Kansas City School District. She is on the Task Force 500, which is set up to help increase minority enrollment at Penn Valley Community College.

Dick Moore became the Director of Corrections and Human Resources for the State of Missouri in 1986. Prior to that, he was Chairman of the Missouri Board of Probation and Parole.

Annette Morgan is the State Representative for the 41st District. She is Chairman, Committee on Elementary and Secondary Education and Co-Chairman, House-Senate Joint Committee on Education. She lives in Kansas City.

Howard Parker is the Director of Adult Basic Education in Sikeston. He has taught school in Purerto Rico and is a member of Laubach Literacy International.

William Pedace is the Corporate Director of Community Relations, General Dynamics Corporation in St. Louis. He is a board member of LIFT-MO.

Barbara Potts is the Mayor of Independence. She is Chair, Missouri Commission on Intergovernmental Cooperation.

Dr. Michael Reagen is the former Director of the Missouri Department of Social Services. He moved to Iowa during the first half of 1989.

Christine Reilly serves as the Executive Director, Missouri Humanities Council. She lives in St. Louis.

Drew Roy is Assistant Vice-President-Public Relations for Southwestern Bell Telephone Company. From St. Louis, he is President of LIFT-MO.

Amy Rome is Executive Director for the Metropolitan Association for Philanthropy, St. Louis.

Diana Schmidt serves as the Executive Director of LIFT-MO. From St. Louis, she is the former Project Director, The Missouri Coalition for Adult Literacy.

Jewell Smith retired in 1989 as Director of Libraries for Greene County in Springfield. She has been a leader among librarians in literacy.

Linda Stephens is the Director of Adult Basic Education for Atchison, Gentry, Holt, Nodaway, North Andrew, and Worth Counties.

Dr. Linda Talbott is President, The Clearinghouse for Midcontinuent Foundations in Kansas City.

Avis Tucker is the publisher of *The Warrensburg Daily Star Journal.* She is a member, the Missouri Coordinating Board for Higher Education.

Terrance Ward is President of the H & R Block Foundation in Kansas City. He has served as the Chairman for the local Literacy Task Force.

Gerald Wichman is the IBM Education Advisor in Kansas City. He is a Board Member, LIFT-MO.

STAFF MEMBERS

Ben Sells, Executive Director

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ACKNOWLEDGMENTS

University of Missouri

The Council thanks University of Missouri's President C. Peter Magrath for his support of the council's activities.

President Magrath funded two graduate students, Mark Vogel and Craig Thompson, to carry out much of the research, writing, and day-to-day activities of the council. President Magrath also supplied office space and office support, computer equipment, and expenses for travel. Several faculty and staff from the four campuses also prepared research materials and testimony; the Council appreciates the support of Missouri's land grant university.

H. Floyd Gilzow, Jr.

The Council salutes Floyd Gilzow for his leadership. He was the leader for Missouri's Academy Team to the Council of State Policy and Planning Agencies. During the Council's first year, Floyd served as the Executive Director and helped author the Interim Report. While his full-time job is to serve as the Executive Deputy Secretary of State, Floyd's knowledge and insight into Missouri's illiteracy problem has been especially helpful.

Mark Vogel and Craig Thompson

The Council is grateful to Mark Vogel and Craig Thompson for their hard work and excellent service. They gathered the research materials, planned public hearings, communicated with a variety of groups and individuals who have a stake in Missouri's illiteracy problem, and wrote most of the text of the Final Report.

Scott Schlotz

Finally, the Council appreciates the efforts of Scott Schlotz, Director of Data Processing for the Secretary of State's office. Using desk-top publishing computer equipment, Scott converted the entire text of the Final Report to camera-ready form to take to the printer. His work saved the Council money, enabling more copies of the Final Report to be printed and distributed.

GOVERNOR'S ADVISORY COUNCIL ON LITERACY

Literacy resists definition. In the horse and buggy economy of 1889, literacy meant the ability to sign one's name. In the machine economy of 1939, literacy meant completing what's equivalent to today's second grade. Thus, most people connect literacy with reading and writing; however, in the 1989 economy and the economy of the 21st century that definition is inadequate because the majority of people make a living with their minds and not their hands.

Literacy entails basic skills (reading, writing, and counting); **life skills** (understanding signs, labels, instructions, and directions); **and job skills** (critical thinking, decision making, adapting to change). Skills that are currently associated with the 8th grade level now serve as the bare minimum for entry level jobs; however, between now and the year 2000, a majority of all new jobs will require some post-secondary education.

Literacy is a receding horizon. The skills needed to enter the workforce continually increase; the skills necessary to be in the workforce today will be inadequate for tomorrow's workplace. Until now, Missouri has successfully matched people with jobs, but the indicators point to a future of jobs without people.

"Literacy is a receding horizon"

Missouri is in the middle of a national problem. Functional illiteracy is a problem which affects the entire country. By almost every statistic used to rate states by literacy, Missouri ranks in the middle of our nation or about average. Average isn't bad, but it's not good enough. We are on a slippery slope—without action the possibility of heading downhill is likely and the opportunity to make our state more productive in the coming decades demands immediate steps. We must not slip, and we must take steps to improve.

This crisis already casts its shadow over Missouri. A recent study by the St. Louis Confluence organization shows that the city's economic vitality is threatened by a shrinking pool of job applicants, many ill prepared for increasingly complicated jobs. Demographics are causing the total number of job seekers to decline. The number of qualified job seekers is shrinking because their skills are not equal to the jobs. The report warns that if industry executives cannot find the workers needed, they may move the jobs to regions that have a skilled labor force. The problem of illiteracy means employers can't find employees. The lack of skilled workers has a direct bearing to our ability to compete.

No Missourian is insulated from this skills deficit. Certainly the 11% of the adult population (approximately 365,000 people) who are functionally illiterate in Missouri are affected in many ways. There's the cost to the individual quality of life. Employed illiterate adults earn 42% less than the average high school graduate—that's just the financial cost. But all of us pay the price of illiteracy. The economic well being of each Missourian is determined by everyone else's economic well being.

Creating new jobs is not enough. We want to be sure that we're not only working to have jobs but that we're also dedicated to having people who can do those jobs. Our focus must be twofold: preparing the future workforce and reshaping the current workforce.

The Governor's Advisory Council on Literacy proposes three major Recommendations supported by 30 specific Action Plans. The Recommendations are in three major areas: The Early Years, The School Years, and the Adult Years. These recommendations are designed to help Missouri meet the challenges of the 1990's and into the 21st Century. Following the text of the Executive Summary, the Recommendations and Action Plans are restated.

"The Early Years: Giving Our Children a Running Start"

THE EARLY YEARS: Giving Our Children a Running Start.

Missouri should guarantee the opportunity for all of our children to be prepared for their school years.

A child's educational future can be influenced before birth. The battle to fight illiteracy must start at the beginning to insure that babies are not handicapped by preventable health problems. Prenatal care is an essential investment for the future workforce: prenatal care costs as little as $600 per person, but intensive care for a premature infant can easily cost $1,000 a day. Failure to focus on prenatal care will trip children up long before their school years.

Education begins at birth. We concur with columnist William Raspberry when he writes that "Home is a child's first school, the parent is the child's first teacher, and reading is the child's first subject." Unless parents are involved with their children from day one, children will stumble and fall behind their peers when its time to start their school years.

The early years are the single most critical period in a young person's life for affecting educational success. We no longer compete with people in another state or states, we compete with people around

the world. And we're playing catch-up. The state of Missouri must bolster existing resources and programs on the young years; Missouri parents of young children must help give their children a running start for their school years.

THE SCHOOL YEARS: Preparing Our Students for the 21st Century

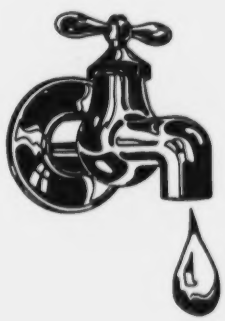
"School Years: Preparing Our Students for the 21st Century"

Missouri should focus on keeping our students in school and ensuring that their education prepares them for their adults years.

We need a generation of demanding parents. Education is too important to be left to educators and politicians. Too often, parents take their children to the first day of school and never return. Parents must turn off the television and turn on to their child's homework. Parents need to spend time at their child's school for many reasons, not just for athletic events. It's no accident that there's a strong correlation between home environment and academic achievement. The family who fails to be involved in their child's education risks seeing that child unprepared for the next century.

We must turn off the spigot on dropouts. One of every four high-school students in Missouri never graduates; the most likely destination for dropouts is poverty or prison. The lack of parental involvement is compounded by the fact that schools are doing too little to stem the dropout rate. Students can't be allowed to forfeit their future by dropping out and society can't afford to have 25% of its entry level workforce unprepared to be in today's workplace. Missouri must plan now to reduce the dropout rate to less than a trickle if we want to insure a future of opportunity in the next century.

"We must turn off the spigot on dropouts"



A high-school diploma must certify competency. To many employers, graduating from high school doesn't guarantee literacy because too often a diploma is simply a certificate of attendance. Businesses now spend one third of their training budgets on teaching workers skills that they failed to acquire in school, and 75% of college and university faculty think undergraduates are seriously underprepared in terms of basic skills. The result of the school years, a diploma, must mean that the student is prepared for the world of college and work.

The education of one generation determines the economic success of the next generation. It's important for students to stay in school, for their parents to support them at home, and for a diploma to have merit. Only then will the sons and daughters of Missourians be prepared for productive adult years in the 21st century.

"The Adult Years: Providing Our Citizens a Future With Opportunities"

THE ADULT YEARS: Providing Our Citizens a Future with Opportunities.

Missouri should provide opportunities for all our adults, especially those who are underskilled, to improve their literacy skills, life skills, and job skills.

Businesses need to add school bells to their time clocks. Functional illiteracy has a potential death grip on the profitability of industry: their bottom line is endangered. Businesses must invest in their human resources by "upskilling" the current workforce and working with schools to prepare the future workforce. They must invest in their human resources the way they have invested in buildings, equipment, inventory, and marketing in the past. Business has no option but to lead because the consequences are too costly: the inability to compete, produce, and earn. Business must help provide answers, not just questions.

"Creaming" the workforce is no longer an option. Missouri can no longer rely on just 90 or 95% of the workforce to get the job done. We need to match people with job vacancies. We must shorten the unemployment lines and reduce the welfare rolls. We must insist that every Missourian become a part of our productive society. We need to make it easier for adults to come back to school for retraining and retooling so they can move up the economic ladder.

"People are imprisoned by illiteracy"

People are imprisoned by illiteracy. This imprisonment comes in many different forms but applies in the most literal sense to the Missouri Department of Corrections. The highest concentration of functional illiterates in Missouri are in our correctional institutions—85% dropped out of school; 42% have skills below the fourth grade level. Unless those in prison increase their skills and abilities, they're likely to return after being released. Missourians who end up in prison are people who have failed everywhere else. To break that cycle of failure, opportunities to increase their economic powers should be extended to those behind bars.

ENOUGH IS KNOWN FOR ACTION —
THE STRUCTURE FOR THE SOLUTION IS PRESENT.

Missouri has a lot to offer. There's the heritage of George Washington Carver, Susan Blow, Samuel Clemens and Laura Ingalls Wilder. Our state is the population and transportation center of the country. Missouri has a unique diversity of natural resources; however, the key ingredient to Missouri's future is in fact our only expandable

natural resource—the people of our state. While illiteracy is a national problem, it will only be solved at the state level. There are no handouts being extended from Washington, so we are left to rely on our own sources, our own initiative.

We know enough to take action. This report plus a handful of other state and national reports document the problems of illiteracy. This report charts a path for tackling the challenge of illiteracy in Missouri by focusing on three important groups of people: young children, school students, and adults.

Progress requires partnerships between families, schools, governments, and business/labor.

Time is up and many actions and additional financial commitments are needed. The council proposes a funding formula that ensures our efforts will pay themselves back several fold. The results may not be immediate, but they will be forthcoming. These 30 Action Plans must be initiated before the middle of the next decade. A dozen require a financial commitment in the state budget. Approximately $50 million added to a state budget of approximately $8 billion — $4 billion which is state funds — over the five-year period (fiscal years 1991-1995) is essential. It's also modest, practical, and most importantly, doable.

The structure for the solution is present: progress requires partnerships. Almost every single recommendation will require a partnership between four institutions: families, schools, governments, business and labor. Each is essential, none is dominant. Working together, Missouri will have people for jobs. And we can take a confident step into the 21st century.

Roy Blunt, Chairman
Missouri Secretary of State

Robert Bartman, Vice-Chairman
Missouri Commissioner of Education

Ben Sells
Executive Director

RESTATEMENT OF RECOMMENDATIONS

The Governor's Advisory Council on Literacy proposes three major Recommendations supported by 30 specific Action Plans. The Recommendations are in three major areas: The Early Years, The School Years, and the Adult Years. These Recommendations are designed to help Missouri meet the challenges of the 1990's and into the 21st Century.

The Recommendations and their respective Action Plans are contained within the text of the report with supporting research and material; however, they are restated here for the benefit of the reader.

THE EARLY YEARS: Giving Our Children a Running Start

Missouri should guarantee the opportunity for all of our children to be prepared for their school years

Action Plan 1: Prenatal care, especially for teenage mothers, should be improved and better coordinated by the State Departments of Health, Social Services, and Mental Health.

Action Plan 2: The Department of Health in cooperation with the departments of Elementary and Secondary Education, Mental Health, and Social Services should expand the pilot project "'First Steps" so that it continues to grow in Missouri.

Action Plan 3: By 1995, the State Legislature should provide the funding necessary to make Parents as Teachers available to all families who have young children and who desire to be involved.

Action Plan 4: Missouri's congressional delegation and lobbyists should work toward full implementation of Head Start to serve all eligible families by 1995.

Action Plan 5: Large businesses and corporations should support employer-involved child-care centers that are affordable and of high quality to alleviate the shortage of child-care facilities.

Action Plan 6: State agencies which have responsibility for pre-school child-care services should encourage the use of book and library resources as part of the basic program requirements.

THE SCHOOL YEARS: Preparing Our Students for the 21st Century

Missouri should focus on keeping our students in school and ensuring that their education prepares them for their adult years.

Action Plan 7: Because children learn to read by a variety of methods, school districts should explore and support different alternatives for the teaching of reading. Further, districts should provide inservice programs that would enable teachers to determine the materials and means that best foster the development of literacy.

Action Plan 8: Schools should assure that all students master essential skills by the third grade.

Action Plan 9: The State Board of Education should include as required teacher-education curriculum at all colleges and universities training on how to detect learning disabilities and basic-skills deficiencies, with attention given to detecting the 16 dropout warning signs.

Action Plan 10: The Department of Elementary and Secondary Education should implement its strategy (stated in "The Missouri Plan for Literacy Advancement") of revising the school approval process to require districts to implement immediate remedial intervention strategies for at-risk students, with the goal being to reduce the state dropout rate from 25% to 15% by 1995.

Action Plan 11: The Department of Elementary and Secondary Education should promote the development of quality child-care facilities in conjunction with, and preferably within the physical facilities of, the school system to enable young mothers who have not graduated from high school to continue their schooling.

Action Plan 12: An English as a Second Language component should be made available for the certification of Missouri ESL teachers.

Action Plan 13: The Department of Elementary and Secondary Education should establish regional roundtables to foster strong partnerships between businesses and schools.

Action Plan 14: Businesses should cooperate with schools by providing money and expertise and should hold schools accountable in ongoing business/school partnerships.

Action Plan 15: The State Legislature should promote innovative means to keep students from leaving school before graduation, such as alternative schools, the proposed raising of the driving age to 18 for those who drop out of school, and the increasing and decreasing of AFDC payments to families based on their childrens' school attendance and academic performance.

Action Plan 16: School districts should administer a competency test in the 12th grade and award to those students passing the test a special certification on their diploma.

Action Plan 17: The Department of Elementary and Secondary Education should mandate in Missouri's schools the dropout definition which states that dropouts are

"persons neither enrolled in school or high school graduates." When a student disenrolls and does not request records within the first 20 days of the following quarter, the school should consider the student a dropout. Also, schools and school districts should collect data on dropout rates from the seventh grade through graduation.

Action Plan 18: School districts should report the names, mailing addresses, and telephone numbers to the Literacy Hotline or local Adult Basic Education centers of students who are 16 years of age or older and who drop out of school for any reason other than to attend another school, college, or university or enlist in the armed services.

THE ADULT YEARS: Providing Our Citizens a Future with Opportunities.

Missouri should provide opportunities for all our adults, especially those who are underskilled, to improve their literacy skills, life skills, and job skills.

Action Plan 19: The Department of Elementary and Secondary Education should develop and implement strategies to provide Adult Basic Education Programs for all areas in Missouri not currently served.

Action Plan 20: By 1995, the State Legislature should increase funding five fold and provide greater flexibility in funding for Adult Basic Education to reach 10% of the eligible population and to make classes more available.

Action Plan 21: Community colleges and four-year institutions should (1) focus additional resources on programs that meet the needs of adult learners, including the initiation of cooperative projects with industry, and (2) foster life-long learning through increased efforts at attracting adults to continuing-education programs.

Action Plan 22: The State Legislature should offer incentives for companies to upgrade existing employee basic skills. This may include tax credits for successful programs.

Action Plan 23: Libraries should continue to assist in coordinating literacy training and/or Adult Basic Education programs to provide better recruitment, alternate sites, and reading materials.

Action Plan 24: By 1995, the State Legislature should increase funding for libraries to (1) bring per-capita funding in Missouri up to the national average, (2) support the staffing needed to conduct activities in all libraries for pre-school children and to assist adult literacy programs, and (3) provide grant money for library service for those geographic areas not currently served.

Action Plan 25: Civic, religious, and professional organizations should make literacy a top priority by encouraging their members to serve as volunteers and by directing their charitable giving to literacy organizations. Secondary schools, colleges, and universities should provide incentives for students to volunteer for tutoring those in need.

Action Plan 26: State agencies that provide adults with training in literacy skills, basic skills, and job skills should be housed in the same physical facility at the local or regional level.

Action Plan 27: The State Legislature should fully implement Missouri's Learnfare/ Welfare-to-Work program, along with the appropriate funding and evaluative procedures.

Action Plan 28: By 1995, prison authorities should provide sufficient instruction so that 90% of those inmates categorized as functionally illiterate achieve an eighth-grade level of literacy before they are released from incarceration.

Action Plan 29: By the year 2000, capable inmates should be required to earn a High School Equivalency Diploma (GED) before they can be granted parole.

Action Plan 30: The Governor should create the Human Resources Development Council, replacing the current state councils related to Adult Basic Education, Vocational Education, Job Opportunities and Basic Skills, the Job Training and Partnership Act, and Employment Security. This one body would advise the Governor on a variety of programs serving Missourians.

Estimated adult illiteracy by Missouri county.

DESCRIPTION: About 365,000 adult Missourians, nearly 11% of the adult population, are projected to have "illiteracy problems." This table presents estimates by county by providing two figures. The "%" column shows the number of adults in the county who have "illiteracy problems"; the "Rank" column shows how counties compare with one another. A high ranking means a smaller problem; a low ranking means a larger problem.

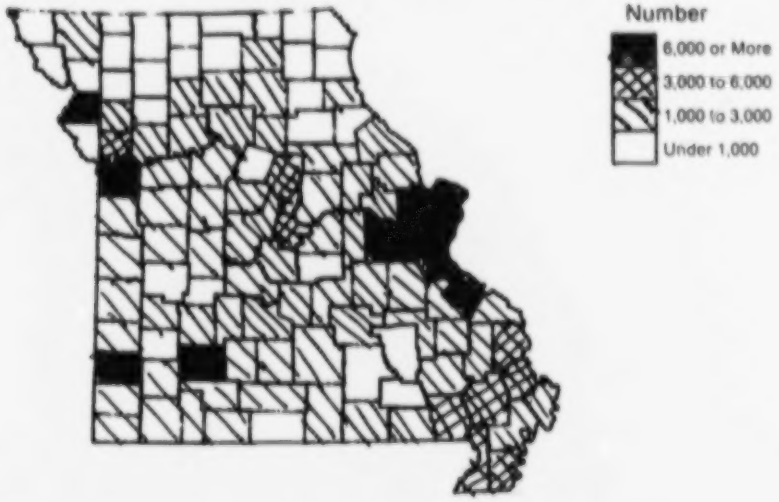
County	%	Rank	County	%	Rank	County	%	Rank
Adair	8.1	108	Harrison	12.4	70	Pettis	11.3	83
Andrew	10.0	100	Henry	12.8	65	Phelps	10.1	99
Atchison	10.1	97	Hickory	14.6	35	Pike	13.2	53
Audrain	11.9	76	Holt	11.3	81	Platte	4.5	116
Barry	12.9	62	Howard	13.0	55	Polk	11.8	78
Barton	12.8	63	Howell	14.3	38	Pulaski	9.1	105
Bates	13.2	51	Iron	15.4	26	Putnam	14.9	29
Benton	15.8	19	Jackson	5.9	114	Ralls	12.0	75
Bollinger	18.0	6	Jasper	10.4	93	Randolph	11.0	89
Boone	4.7	115	Jefferson	10.3	96	Ray	11.1	88
Buchanan	10.4	94	Johnson	6.5	113	Reynolds	16.9	12
Butler	15.4	25	Kansas City	9.6	101	Ripley	18.9	3
Caldwell	12.1	74	Knox	12.8	64	St. Charles	7.4	111
Callaway	10.9	90	Laclede	13.0	58	St. Clair	15.1	28
Camden	11.5	80	Lafayette	11.9	77	St. Francois	13.2	50
Cape Girardeau	9.5	103	Lawrence	12.6	68	St. Louis City	17.6	7
Carroll	12.9	60	Lewis	10.7	92	St. Louis Co.	7.9	109
Carter	16.1	15	Lincoln	13.8	40	Ste. Genevieve	13.3	45
Cass	8.2	107	Linn	12.1	72	Saline	13.3	45
Cedar	14.8	31	Livingston	11.3	82	Schuyler	13.0	56
Chariton	13.4	44	Macon	13.5	42	Scotland	13.3	46
Christian	10.1	98	Madison	17.4	9	Scott	13.9	39
Clark	12.3	71	Maries	16.4	14	Shannon	15.9	18
Clay	9.2	104	Marion	11.2	84	Shelby	12.6	67
Clinton	9.6	102	McDonald	13.2	52	Stoddard	16.1	16
Cole	8.5	106	Mercer	13.2	48	Stone	11.6	79
Cooper	12.1	73	Miller	13.5	41	Sullivan	14.5	36
Crawford	15.3	27	Mississippi	18.1	5	Taney	10.7	91
Dade	13.4	43	Moniteau	13.1	54	Texas	14.6	34
Dallas	14.7	33	Monroe	12.5	69	Vernon	11.2	86
Daviess	13.0	57	Montgomery	14.8	32	Warren	13.2	47
DeKalb	11.2	87	Morgan	14.8	30	Washington	17.5	8
Dent	15.9	17	New Madrid	18.1	4	Wayne	19.3	2
Douglas	15.5	23	Newton	10.3	95	Webster	13.0	59
Dunklin	17.1	11	Nodaway	7.8	110	Worth	12.9	61
Franklin	13.2	49	Oregon	15.8	21	Wright	15.8	20
Gasconade	16.7	13	Osage	15.7	22			
Gentry	12.8	66	Ozark	15.4	24	Missouri	10.9	
Greene	7.4	112	Penniscot	19.6	1			
Grundy	11.2	85	Perry	17.1	10			

SOURCE: University Extension, University of Missouri Office of Social & Economic Data Analysis, Feb., 1988.

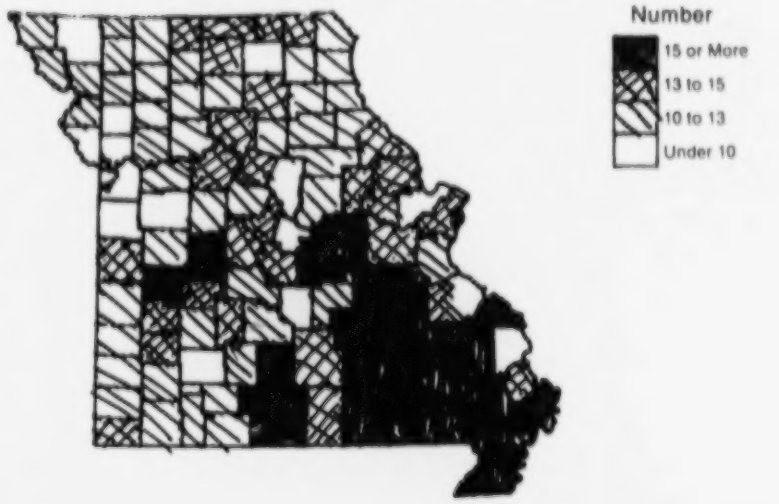
Estimated adult illiteracy by Missouri — Geographic Representation.

DESCRIPTION: These two maps geographically show the estimated adult illiteracy by county in Missouri.

Estimated Number of Adults With Basic Literacy Problems



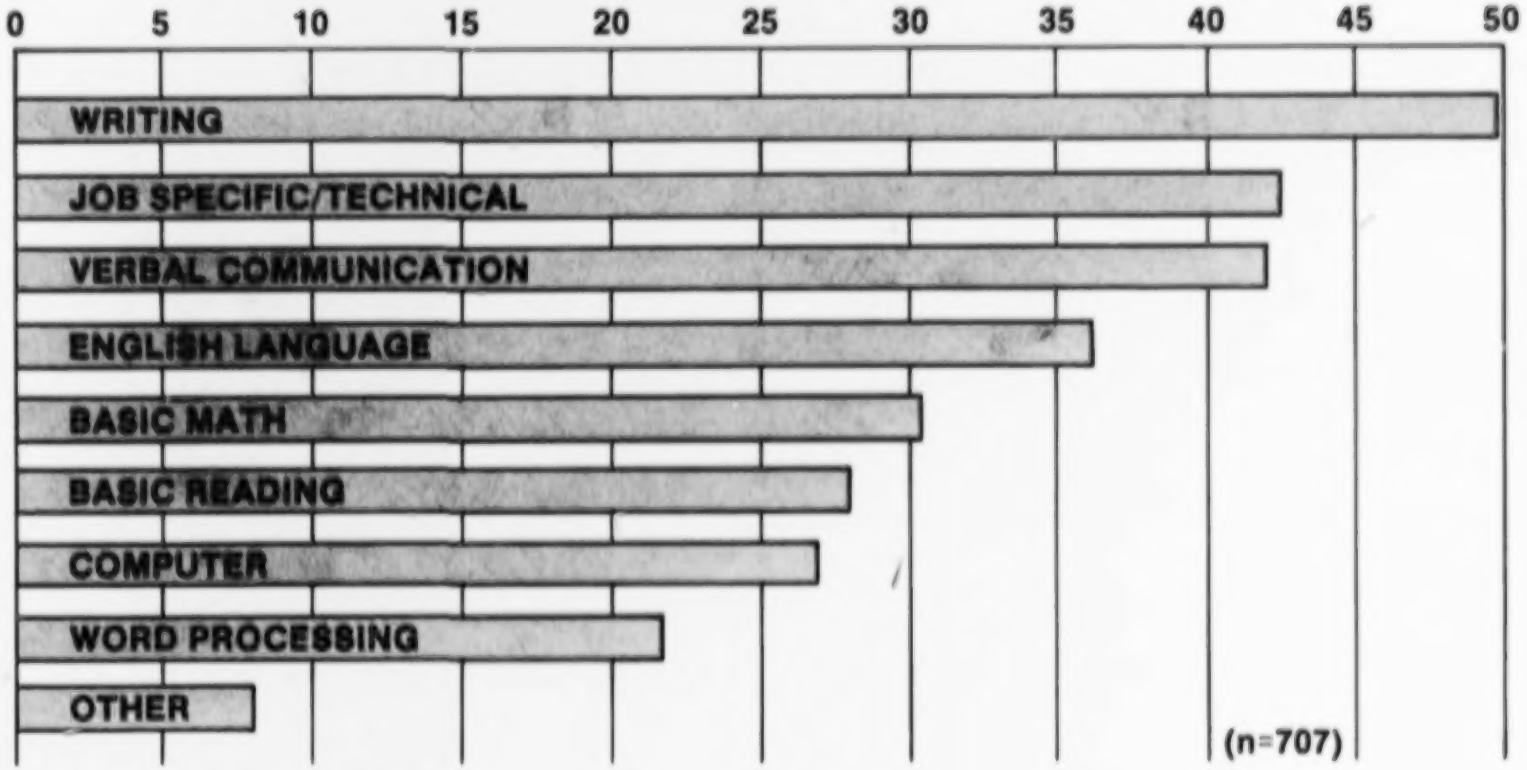
Estimated Percent of Adults With Basic Literacy Problems



SOURCE: University Extension, University of Missouri Office of Social & Economic Data Analysis, Feb., 1988

Types of Skill Shortages

DESCRIPTION: This graph shows percent of skills lacking in applicant pool.



SOURCE: The ASPA Labor Shortage Survey, Martha I. Finney, **Personnel Journal,** Feb., 1989.

Business Demand Increases as Youth Population Decreases.

DESCRIPTION: We face demographic trends which show a declining number of youth available to enter the labor pool while the demand for employees grows. Assuming that the nation's economy continues to expand at a moderate rate, business will be forced to dip increasingly into the at risk segment of the entry-level youth employment pool.

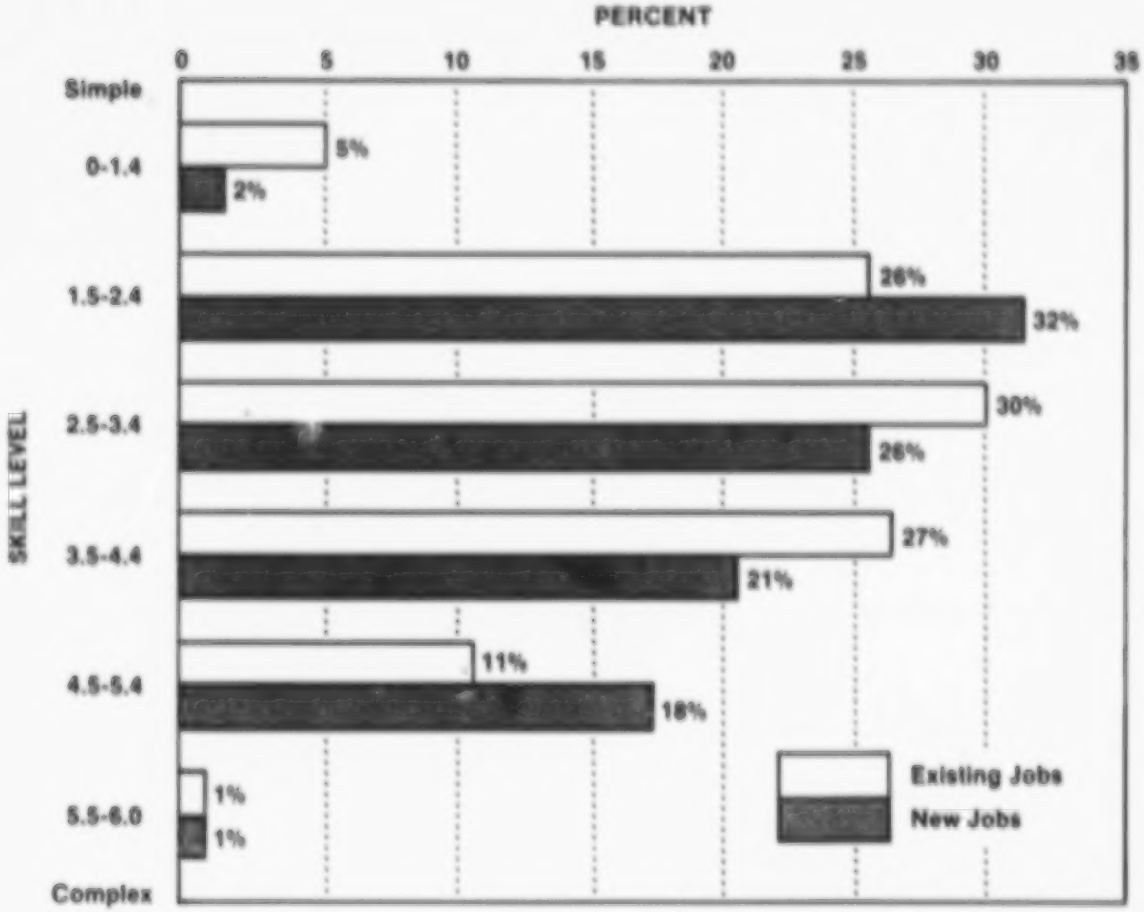
"OK" means employable.

"At Risk" means probably not employable using the definition above.

SOURCE: U.S. Bureau of Statistics, 1986.

21

Comparison of Missouri's New and Existing Jobs.



Skill Level =	Grade Level
0-1	Grades 1-3
1.1-2	Grades 4-6
2.1-3	Grades 7-8
3.1-4	Grades 9-12 (high school)
4.1-5	Grades 13-14 (1-2 years college)
5.1-6	Grades 15 and above

SKILL RATINGS OF TYPICAL JOBS	
Natural Scientists	5.7
Lawyers	5.2
Engineers	5.1
Management	4.4
Teachers	4.2
Technicians	4.1
Marketing and Sales	3.4
Construction	3.2
Administrative	2.9
Service Occupants	2.6
Precision Production	2.5
Farmers	2.3
Transport Workers	2.2
Machine Setters	1.8
Hand Workers	1.7
Helpers and Laborers	1.3

SOURCE: Missouri Occupational Information Coordinating Committee

JOBS WITHOUT PEOPLE

The Coming Crisis for Missouri's Workforce

Full Text

Final Report
Governor's Advisory Council on Literacy
October 1989

John Ashcroft
Missouri Governor
Roy Blunt, Chairman
Missouri Secretary of State
Robert Bartman, Vice-Chairman
Missouri Commissioner of Education

Table of Contents

The Governor's Advisory Council on Literacy 25

Education and Integration 25
The Definition of Literacy 27
Literacy and Missouri's Workforce 28
High-Skill Jobs, Low-Skill Workers 29
Enough Is Known for Action
—The Structure for the Solution is Present 31

The Early Years 32

Prenatal Care 34
Infancy 35
Three-to Four-Year Olds 37
Family Involvement 38
Television 40
Libraries 40

The School Years 41

At-Risk Missourians 42
Attaining Literacy 43
Remediation 45
At-Risk Parents and Children 47
English as a Second Language 49
Businesses and Schools 51
Dropping Out 54
Graduating 56
Catching Dropouts 57

The Adult Years 59

Adult Basic Education 60
Job Skills and Business Involvement 63
Libraries 64
Volunteers 65
Community Analysis 67
Learnfare/Welfare-to-Work 68
Education in the Prisons 69
The Human Resources Development Council 70

Notes 71
Works Cited 74

THE GOVERNOR'S ADVISORY COUNCIL ON LITERACY

The decade of the eighties has seen the formation of literacy campaigns in nearly every state, including Missouri.

America's first lady, Barbara Bush, has chosen literacy as her number one concern.

The United Nations General Assembly has proclaimed 1990 International Literacy Year.

Missouri affirms these efforts with the formation of the Governor's Advisory Council on Literacy. The Council, comprised of leading Missourians from business, education, government, and agriculture, seeks understanding of past and present campaigns in order to recommend the future for Missouri's literacy efforts.

The Council, comprised of leading Missourians seeks understanding of past and present campaigns in order to recommend the future for Missouri's literacy efforts.

The Council held ten open meetings across Missouri, in Cape Girardeau, Joplin, Kansas City, Kirksville, Springfield, St. Joseph, and St. Louis and heard from over 400 representatives from schools, businesses, labor, libraries, volunteer organizations, Adult Basic Education, universities, and colleges. In addition, students already participating in Missouri's literacy programs gave valuable testimony. Through its open meetings and research, the Council learned about the status of Missouri as it approaches the next century, with its goal being to pass on this information, informing the educators, learners, employers, workers, policymakers, and voters of Missouri, in order to create an atmosphere for change. To ensure success, Missouri must see the need for change, must have a positive attitude about literacy, and must support these attitudes with action.

To ensure success, Missouri must see the need for change, must have a positive attitude about literacy, and must support these attitudes with action.

Education and Integration

The Council recognizes that calls for large-scale literacy campaigns are not unique to the United States or to the 1980's. Historians Robert F. Arnove and Harvey J. Graff state that major campaigns all over the world can be traced back over 400 years, almost always accompanying larger transformations in societies. Massive literacy campaigns have been initiated by charismatic leaders such as Luther, Calvin, Knox, and Gandhi, and have been tied to notions of salvation, redemption, economic reform, and enlightenment.[1]

From the time of the earliest settlements to the present, the US has

carved unique attitudes toward literacy and formal education. The 19th-century US common-school "crusade," which led to our present public-school system, tied literacy strongly to the development of democracy. Horace Mann and those who followed argued that all citizens needed the benefits of literacy in order to participate fully in the republic. In the first half of the twentieth century, literacy and formal schooling have continually been tied "to the creation of a new and more just social order."[2] Thus, literacy has been viewed as more than a set of skills. Rather, the acquisition of literacy has been linked to goals as broad as producing a "more moral society or a more stable political order."[3]

. . . literacy serves to empower the learner.

Any review of past literacy campaigns, whether in or out of public schools, reveals that literacy serves to empower the learner, "especially when it works in conjunction with other changes."[4] Ultimately, most observers of literacy campaigns suggest that opportunities for exercising literacy determine how prized this new knowledge will be. Recent cries for new literacy efforts grow out of the realization that the next century will demand ever increasing abilities to communicate and also out of the realization that each citizen pays the price for adult illiteracy in this country.

The Council recognizes that fundamental changes are in store for Missouri as well as the rest of the country, and new literacy campaigns must focus on these changes, meeting the particular needs of Missourians in the 21st century.

The Council recognizes that fundamental changes are in store for Missouri as well as the rest of the country, and new literacy campaigns must focus on these changes, meeting the particular needs of Missourians in the 21st century. Schooling for these changes will need to continue to educate "future citizens," as well as integrate individuals into a changing economic system. As long ago as 1918, the National Education Association argued that "education in a democracy . . . should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends."[5] Education in all its forms must be rejuvenated in this state. What is now tired and beaten must be infused with energy and conviction to meet the literacy needs of the new century.

Jeanne S. Chall, Elizabeth Heron, and Ann Hilferty suggest that even a cursory look at U.S. history clearly "indicates that adult illiteracy has been with us for a long, long time."[6] These historians pinpoint the first major US literacy campaign as occurring during the Great Depression. The second national campaign can be traced to the Right-to-Read Effort of 1969 when federal funds were allocated to eradicate adult illiteracy. They argue that now a new campaign is needed, a campaign that will tie adult literacy programs to programs

for improving the literacy of young people.

Several lessons have been learned from reviews of previous campaigns:

* Campaigns need to run long enough to accomplish goals.

* Campaigns need to combine local initiatives with larger (state and national) programs.

* Campaigns need to take into account that many of those most in need will resist programs that seem to be imposed on them.

* Any literacy campaign must eventually look strongly at school age learning in order to stop future illiteracy.

* Literacy programs must view literacy in the contexts in which it occurs.[7]

* Campaigns need to be intergenerational in nature.

The Definition of Literacy

American workers face an ever intensifying need for literacy. Literacy itself is and will continue to be a receding horizon; that is, the level of ability adequate twenty-five years ago or even today will not be adequate tomorrow. Such considerations have led the Council to focus on what is often referred to as "functional literacy." The Council thinks of functional literacy as the ability to read, write, and comprehend facts on familiar subjects; to perform basic math computations; and to understand whatever signs, labels, instructions, directions, etc., are necessary to survive in one's environment. The eighth grade is targeted as the most basic entry-level functional limit.

Literacy itself is and will continue to be a receding horizon; that is, the level of ability adequate twenty-five years ago or even today will not be adequate tomorrow.

Added to this definition are the demands of an individual's job, particular day-to-day activities, and personal goals, which often require a higher level of skills. Dr. Richard Robinson and Dr. Judy Wedman of the University of Missouri suggest workplace literacy can be seen as basic literacy skills, job related literacy skills, and self-awareness skills. Basic literacy skills include the ability to "use communication, computation, and problem-solving skills to minimum performance levels." This includes (among other traits) the ability to use a variety of print materials, to write and record information, to speak coherently, to understand and apply basic math concepts, to

follow complex written directions, and to "deal with problems or situations that present multiple variables." Job related literacy skills involve the "communication, computation, and problem-solving skills" identified with specific jobs. Self-awareness literacy involves the ability to develop realistic career goals, to assess abilities, and to make appropriate decisions. Literacy of the printed and spoken word is also affected by and interconnected with literacy in relation to society, culture, politics, and other areas where specific knowledge and skills are necessary for interdependence.

Literacy and Missouri's Workforce

Missouri's greatest resource lies not in its mines, its factories, its acres of farmland, but in its people.

Missouri's greatest resource lies not in its mines, its factories, its acres of farmland, but in its people. The Council sees this human resource as the starting place for all change-whether in the home, the school, or the workplace. But people are a resource that cannot be evaluated by their numbers. Simply counting present and future workers does not adequately predict the economic future of Missouri's workforce. As entry-level jobs become increasingly more sophisticated, the basic skills needed to enter the workforce also increase. In Workforce 2000: Work and Workers for the 21st Century, William B. Johnston reports, "Between now and the year 2000, for the first time in history, a majority of all new jobs will require postsecondary education."[8] By the year 2000, 24% of new jobs will require four or more years of college (currently, 22% of jobs require this). Also, jobs requiring the lowest skill levels (basic/minimal language, reading, and mathematics) will drop from 9% of the present job pool to only 4% of new jobs, while jobs requiring the highest skill levels will grow from the current 24% to 41% of new jobs.[9]

"Between now and the year 2000, for the first time in history, a majority of all new jobs will require postsecondary education."

When skills obtained in formal education or in job training programs do not match the skills required in the workplace, both the employee and the employer lose.

The quality as well as the quantity of potential workers is of major importance to employers. When skills obtained in formal education or in job training programs do not match the skills required in the workplace, both the employee and the employer lose. To negate these losses and to keep Missouri workers competitive, Missourians must acquire much more than basic skills. Cooperation in teaching these skills must come from all areas of society-including the workplace.

Missouri Opportunity 2000: The State of the Future has provided an impetus for the Council by suggesting that the work done by the state's workforce will change substantially as we approach the next

century and then change repeatedly in the years after that. To remain competitive, workers clearly must have the skills to meet new challenges. The Council is working to address future problems now-so that Missouri will be able to take a confident step forward into the next century.

Both employer and employee needs call for literacy programs that will address future problems. The Bottom Line suggests that "as a consequence of smaller growth in the labor force and a diminishing pool of qualified workers, employers may face serious skill shortages not experienced since W.W. II." Because of this shortage, employers will almost surely have to recruit from "traditionally less skilled groups and underutilized population groups."[10] This means increasing numbers of women, minorities, and immigrants will have to be recruited and trained to fit future needs.

". . . as a consequence of smaller growth in the labor force and a diminishing pool of qualified workers, employers may face serious skill shortages not experienced since W.W.II."

Current employees also will have to adjust to changes in the workforce. Long able to enter the workplace with marginal skills, employees in the future will "face a job market that requires increasingly flexible skills, with many workers changing jobs five or six times during their worklives."[11] The worker, then, will apply for jobs demanding ever increasing thinking and reasoning skills.

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High-Skill Jobs, Low-Skill Workers

To make recommendations for the future, the Council commissioned the Missouri Occupational Information Coordination Committee to write a report categorizing the literacy levels of Missouri's current workforce and determining the levels of literacy required by the workforce of the near future. This step was accomplished by combining information from several existing data bases. The methodology involved in this rather extensive project is available, but to simplify results this report will in most cases simply summarize the results of this computer analysis.

There are three major divisions of characteristics used in this project, all of which are included in the overall concept of workplace literacy:

1. Reasoning, Math, and Language development-education acquired from both formal and informal sources. These three factors combined make up General Education Development (GED).

2. General, Verbal, and Numerical aptitude-capacities or specific abilities needed by workers to learn a given activity.

3. Specific Vocational Preparation (SVP)-the amount of time required to prepare for a particular job.

The Missouri Division of Employment Security has tests for both reading and nonreading individuals designed to measure GED and aptitude levels. The Missouri Occupational Information Coordinating Committee operates an automated system in Missouri that relates the results of these tests to occupations. Linking these two sources provides measurements of both the skill levels needed by Missouri's future workforce and the current skill levels of Missouri citizens.

The fact-finding project, in order to measure present growth and then compare it to future growth, focused on figures for 1984 employment, estimates of 1995 employment, average annual openings due to growth, average annual openings due to replacement needs, and total average annual openings. These criteria are essential in assessing total future needs because they measure both job openings created by growth, and replacement needs for the near future. The Council's project assumed first, like Workforce 2000, that "for each occupation, the new jobs created will require the same levels of education required for that occupation today."[12] This means that noticeable changes will be caused by increases or decreases in actual numbers of jobs in specific skill levels rather than from changing demands of particular jobs. When Missouri's occupations are examined closely (combining reasoning, math, and language demands), small but significant differences between current and future needs become evident.

Movement toward a more complex, service-oriented economy results in decreases in the percentage of unskilled jobs, increases in the percentage of "second level" jobs, and increases in the percentage of jobs near the "top end" of the job spectrum.

In general, occupational trends follow the direction of occupations since World War II. Movement toward a more complex, service-oriented economy results in decreases in the percentage of unskilled jobs, increases in the percentage of "second level" jobs, and increases in the percentage of jobs near the "top end" of the job spectrum.

A comparison of Missouri's occupations to the nation's occupations show that there is almost no difference in the percentage distribution of GED skill-level requirements. In both Missouri and the nation, only 17% of future jobs will require a skill level of 2 or less. The remaining 83% of the jobs will require skill levels higher than 2. In other words, there will be few jobs for persons with low skills.

Skill level 2 is characterized in the reading and writing areas by such qualities as having a passive vocabulary of 5,000 to 6,000 words, reading adventure stories and comic books, and writing compound and complex sentences with adjectives, adverbs, and proper end punctuation. An evaluation system (developed by the Department of Elementary and Secondary Education) was undertaken several years ago to equate the GED levels with school curriculum. Their results place skill level 2 as approximately equivalent to grades 4-6. Unfortunately, not all students who have passed a particular grade level will have mastered the appropriate skill levels.

A separation of the three GED skills shows the following results: 75% of Missouri's future jobs will require language skills above Level 2; nearly 92% will require reasoning skills above Level 2; and 67% will require math skills above Level 2.

Isolating new jobs created by growth in Missouri offers another important perspective. This view shows that only 13% of the new jobs in Missouri have a skill rating of 2 or less for reasoning, math, and language combined.

On the average, the jobs that are losing employment in Missouri are the jobs demanding lower skill levels for each of the occupational characteristics. A comparison of 1984 employment and growth openings also shows an increase in jobs requiring a high level of verbal aptitude. Only 26% of the jobs in 1984 required high verbal aptitude, while 33% of the new jobs are expected to require this level. Verbal aptitude will be in high demand in growing "top scale" jobs, while those jobs demanding little verbal aptitude will continue to decline. But job openings created by growth only represent about 16% of total openings. The remaining openings (84%) are created by persons leaving the labor market (not including turnover). Of these openings, 27% are in the high level of verbal aptitude, 48% in the medium, and 25% in the low.

On the average, the jobs that are losing employment in Missouri are the jobs demanding lower skill levels.

<u>Enough Is Known for Action</u>
<u>–The Structure for the Solution Is Present</u>

Certainly the numbers can paint an ominous picture. And the effects of illiteracy cost individuals and society much more than money-though the causes and solutions are often tied to economics. It will do us little good to panic or throw our hands up in defeat or con-

And the effects of illiteracy cost individuals and society much more than money-though the causes and solutions are often tied to economics.

demn all past practices. In the title of his book on solving America's dropout problem, Andrew Hahn states, "Enough is known for action."[13] The Council takes this stance in dealing with the entire area of literacy.

The Council also believes that the general structure for the solution is present. Programs already in place can meet our needs with the correct support, modification, and cooperation. Existing programs need more money to do their jobs effectively; new information and research needs to be utilized; those providing services need to communicate and cooperate.

The Council believes that communication and cooperation are very important to success in Missouri. Too often, turf battles cause unnecessary overlapping and wasting of money; and services that could be integrated are kept apart, often separating the task from the goal. Programs involved in improving the lives of Missourians need to share information, refer clients to other appropriate services, and pool their resources when possible. One solution to this problem has already been implemented in the Council's most significant accomplishment to date, organization of Literacy Investment for Tomorrow-Missouri (LIFT-MO). This foundation acts as a catalyst between private business and government and as a clearinghouse for statewide dissemination of literacy information and materials.

. . . the Council's most significant accomplishment to date, is the organization of Literacy Investment for Tomorrow-Missouri (LIFT-MO). This foundation acts as a catalyst between private business and government and as a clearinghouse for statewide dissemination of literacy information and materials.

Because illiteracy is only one of a number of problems faced by many Missourians, those concerned with solving these problems must foster cooperation among themselves, and the people of Missouri must develop the networks and information needed for that cooperation.

THE EARLY YEARS: Giving Our Children a Running Start

The people of Missouri should guarantee the opportunity for all of our children to be prepared for their school years.

Literacy is not an isolated product of the formal educational system. Health, family life, and social attitudes, especially during the formative years of early childhood, profoundly affect language acquisition. Furthermore, the roots of illiteracy and academic failure can be traced as far back as prenatal care. Consequently, the Council attempted to discern (a) what factors outside of formal schooling have hampered the progress of the estimated 365,000 adults in Missouri

. . . the roots of illiteracy and academic failure can be traced as far back as prenatal care.

who lack the basic skills to read, write, compute, and otherwise function in society and (b) what solutions are in progress and what solutions are needed.

The Council quickly learned the importance of looking at the preschool child as a whole. Compartmentalizing a child's life according to health, family life, education, nutrition, and day care prevents one from seeing the inextricable ties between these dimensions. Seeing the child as a whole also means, in practical terms, that the various government and nonprofit agencies concerned with families and children must coordinate and build coalitions to take advantage of limited resources. The Council wholeheartedly agrees with Lisbeth Schorr, in Within Our Reach: Breaking the Cycle of Disadvantage, that "[I]n the period between the womb and the school, one cannot care for children without educating them, and one cannot educate them without caring for them."[1]

That illiteracy is intergenerational is well documented. The Council's conversations with former literacy students and educators working with teen mothers painfully brought to life the possibility that Missouri and the nation are confronting a permanent underclass of illiterates, with illiteracy recurring from parent to child. The alarming phenomenon of children having children vividly demonstrates the vicious cycle of illiteracy and academic failure.

. . . Missouri and the nation are confronting a permanent underclass of illiterates, with illiteracy recurring from parent to child.

The Council also learned, however, that within the intergenerational nature of literacy lies the possible key to breaking the cycle. Literacy educators across the nation suggest adult students often learn because they want to read to their children. This was a recurring motif in the Council's public hearings and in conversations with Adult Basic Education students. One mother explained she was compelled to overcome the shame and humiliation of confessing her inability to read by the desire to assist her learning-disabled child.

Literacy educators across the nation suggest adult students often learn because they want to read to their children.

The Council found that parental involvement is the key to the success of preschool programs. Programs such as Parents as Teachers and Head Start not only perform the valuable service of early detection of problem learners but also help identify parents in need of literacy tutoring. Unfortunately, even when such parents are motivated to seek assistance, they frequently confront barriers such as lack of transportation and inadequate child care. Perhaps the greatest barrier is a personal one: the stigma attached to being functionally illiterate.

Finally, the Council learned that promoting literacy on all fronts requires the collaboration of a wide spectrum of organizations and institutions at both the state and local level: social-service agencies, libraries, colleges and universities, businesses, and civic and volunteer organizations.

Prenatal Care

A child's educational prospects may be determined before birth by the quality of prenatal care. Mothers who do not receive adequate care are about three times as likely to have low-birth-weight or premature babies. Centers that follow the progress of low-weight babies report rates of learning disability as high as 40-45% as well as poor language development, reading problems, difficulty with abstract concepts, poor impulse control, and attention deficit disorder. In 1987, 7% of Missouri babies were classified as low weight.

Teenage mothers constitute an at-risk group likely to give birth to low-weight or premature infants. A typical portrait is a young girl with a history of academic failure and low self-esteem who believes she will find love and purpose through motherhood. In reality, she is unlikely to receive adequate prenatal care, and her baby will most likely grow up in a chaotic home life that is not conducive to learning. Such is the cycle of illiteracy that starts before birth.

We conclude that the battle to fight illiteracy must start at the beginning to insure that babies are not handicapped by preventable health problems stemming from inadequate prenatal care.

We conclude that the battle to fight illiteracy must start at the beginning to insure that babies are not handicapped by preventable health problems stemming from inadequate prenatal care. Early preventive measures are more cost-efficient than dealing with problems at a later stage. Prenatal care for a pregnant teenager costs as little as $600 per client whereas intensive care for a premature infant can easily cost $1,000 per day.

Action Plan 1: Prenatal care, especially for teenage mothers, should be improved and better coordinated by the State Departments of Health, Social Services, and Mental Health. Cost: $2 million over five years.

Caring Communities, one example of such interagency cooperation, is being initiated as a pilot program in 1990, beginning with a project in the St. Louis school district. Caring Communities has as its key elements crisis intervention (Families First), cooperative day treatment in the schools, case

management, after-school latchkey programs, adult basic education, breakfast programs, alcohol and drug prevention and intervention, and child health services.

Action Plan 2: The Department of Health in cooperation with the departments of Elementary and Secondary Education, Mental Health, and Social Services should expand the pilot project "First Steps" so that it continues to grow in Missouri. Cost: $2.7 million over five years.

This program provides all-around support to at-risk families with low-birth-weight babies until the child is three years old. Recognizing that many factors affect development, the program helps parents with housing, health care, parenting skills, and education.

Better coordination between hospitals and social service agencies will help identify hard-to-reach families in need of counseling and education. For example, Parents as Teachers coordinators often target hospitals in their recruitment. Hospitals can encourage literacy by promoting programs such as California's "Rock and Read," which encourages reading to children and supplies books to parents. In general, The Council hopes that hospitals continue the trend of providing prenatal care and parenting-skills programs and also refering at-risk families to the appropriate agencies.

Infancy

The Committee for Economic Development states,

> Although the ultimate causes of educational failure may vary significantly from child to child, most educators believe potential dropouts can be clearly identified by third grade. Behavior patterns leading to school failure and dropping out begin to appear during infancy and the toddler years. Without early intervention, such children have difficulty taking advantage of the learning opportunities available in elementary and secondary school. It is, therefore, likely that many otherwise bright children will have their talents lost to themselves and society.[2]

Although the ultimate causes of educational failure may vary significantly from child to child, most educators believe potential dropouts can be clearly identified by third grade.

Yet in 1986, the nation spent $264 billion on education for children age six and older while it spent only $1 billion for children five years and younger. Clearly, we must turn our energies and resources to

preschool education if we are to combat forces that breed illiteracy. As with prenatal care, it is far more cost-efficient to expand preschool educational opportunities than to pay the price of remedial education and welfare.

Missouri is very fortunate to have one of the premiere preschool programs, Parents as Teachers (PAT).

Missouri is very fortunate to have one of the premiere preschool programs, Parents as Teachers (PAT), coordinated by the Department of Elementary and Secondary Education (DESE). In order to promote an adequate family environment, PAT aids parents in preparing for children, gives information on child growth and development, offers guidance in basic-skills development, checks the child periodically to detect educational or sensory handicaps, offers the opportunity to meet with trained parent educators and other parents in the program, and sets up resource centers. Independent studies show that children of participating families-regardless of socio-economic background-are significantly more advanced in language development, problem solving, and social development.

PAT does not remove children from the home for schooling; instead, parent educators give parents research-based, practical information on the development of their children.

PAT does not remove children from the home for schooling; instead, parent educators give parents research-based, practical information on the development of their children. Participation by parents is voluntary, and help is available to parents of children from birth to five years of age, as well as to expectant parents. The Council applauds PAT's open eligibility requirements, noting the importance of programs that do not carry the stigma of being only for low-income families.

PAT also promotes literacy by teaching parents the value of education and by identifying adults with low basic skills or learning disabilities. When confronted with parents who are unable to read, PAT coordinators often provide audiotapes of children's literary classics so parents can still "read" to their children. The Council affirms this positive approach as an excellent way to motivate adults who need an incentive to seek assistance in basic skills.

The number of families served by PAT grew from 17,725 in 1985-86 to 53,175 in 1987-88, and the funds allocated grew from $2,658,750 to $7,976,200 in the same period. For the 1988-89 school year, PAT received $11.4 million from the state government, with school districts being given $150 for each participating family. Current funding provides full services for approximately 30% of Missourians with children up to three years old and preschool screening and parent/child programs for 50% of Missourians with three- and four-year-olds.

PAT should be expanded to all who can benefit from it, and those reluctant to take advantage of the program whether from fear, shame, or simple indifference, should be encouraged to participate.

Action Plan 3: By 1995, the State Legislature should provide the funding necessary to make Parents as Teachers available to all families who have young children and who desire to be involved.
Cost: $15 million over five years.

Additional funding will be necessary for enhanced recruitment of hard-to-reach families, for programs targeting school districts where dropout rates are highest, and for a major public information campaign.

Increased funding will also help facilitate coordination between PAT, hospitals, and agencies concerned with social services and health to help recruit hard-to-reach and at-risk families, especially teenagers.

PAT, as a relatively new program, needs the Missouri School Boards Association to educate local school boards about the merits of the program. Moreover, PAT coordinators report they must often overcome the suspicion of families who fear government interference into their private home lives.

A number of practices have proved successful for engaging reluctant families in beneficial programs such as PAT. Support for these practices by DESE, school districts, and other agencies would help to reach those unaware of current services. DESE should select the two or three most successful practices in the PAT program and implement them throughout the state.

Three- to Four-Year-Olds

The Head Start program, providing both center-based and home-based education and care for disadvantaged 3 and 4 year olds, is a demonstrated success in both Missouri and across the nation. As with PAT, its strengths lie in its focus on the whole child in terms of health, nutrition, and social development, and in its involvement of parents who serve on policy councils and committees and who have a voice in the administration of the program. Many parents serve as volunteers and as paid staff. Head Start coordinators echoed the

The Head Start program, providing both center-based and home-based education and care for disadvantaged 3 and 4 year olds, is a demonstrated success in both Missouri and across the nation.

experiences of PAT staff in their frequent identification of adults with low rates of literacy and referrals to appropriate resources.

However, Head Start is currently serving only 15-20% of eligible families in Missouri. The isolated communities of rural Missouri are not being adequately served, primarily because of inaccessibility, and there is concern about the large number of families whose incomes exceed the poverty line but who are still in need of support services. Other obstacles include child care: many working parents cannot locate affordable child care for the hours after Head Start closes.

Solutions for this problem include additional federal funding for Head Start to better serve the rural areas through more home-based and mobile programs, and for expanded hours at centers to make programs more accessible to working parents.

The Council also believes that businesses and nonprofit organizations must realize that they have a stake in literacy that extends beyond workplace literacy. Employers can help the present and future workforce by working towards improving their employees' attitudes about education, providing practical assistance for educational programs in general, and assisting parents and children by supporting child-care programs.

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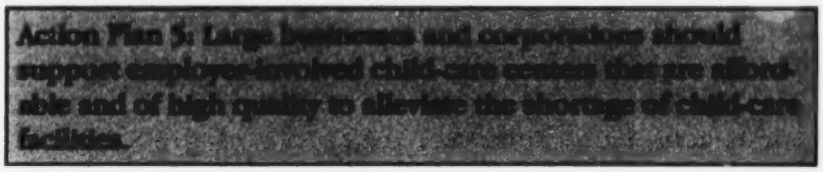

Adequate child care promotes productivity and reduces absenteeism. Larger businesses and corporations are encouraged to pool their resources and involve smaller businesses and nonprofit organizations unable to establish their own programs.

Family Involvement

Missouri Commissioner of Elementary and Secondary Education Robert Bartman, in an editorial in the Kansas City Star, writes that

"family involvement and support is the key ingredient-the catalyst-needed to make quality education a reality." Because of the changes in the structure of families, he prefers the term "family involvement" over "parental involvement":

> Families have changed enormously in the past 20 years. We need to expand the definition of "family" to include step-parents, grandparents, non-custodial parents and foster parents-everyone who is part of the vital support system for children's learning.[3]

It has been well documented that family/parental involvement in education increases student performance and probability of success. This is recognized by Missouri school administrators and teachers, as shown in their responses to the surveys conducted by the council. Parents lay the foundation for education: The National Parent Teacher Association (PTA) reports, "Two-thirds to three-quarters of all usable language is acquired before age 3."[4] Parental involvement is important during school as well-from kindergarten to graduation. Teachers need the encouragement, practical help, and student accountability that parents can provide. And the role of parents, of the entire family, is not limited by the boundaries of one household. Families can make a difference for their community, for all the children and students in Missouri.

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Parental involvement is important during school as well-from kindergarten to gradation.

The Council encourages community efforts such as those demonstrated by PTA to promote the welfare of all children. Open houses and public meetings can be used to facilitate communication between educators and the general public. Extra efforts must be made to involve those members of the community who are reluctant to respond to traditional invitations.

Although the Parents as Teachers program effectively addresses the importance of parents in early education, and DESE touches on the issue in "The Missouri Plan for Literacy Advancement," more needs to be done for parents of school age children. DESE and other educational authorities should develop programs for involving parents in their children's education. These programs might include scheduling regular meetings with parents to assess student progress, suggesting ways in which parents might help, notifying parents of truancy, and involving parents in initiatives to improve student attendance.

Parents, and other community members, can also help with many of the tasks that make a teacher's day so busy-such as supervising stu-

dents outside the classroom, tutoring, helping teachers with paperwork, and speaking to classes about their own areas of knowledge. Parents can even operate a homework hotline after school hours.

Families need to become more demanding of schools, of children, and of themselves. Students would benefit if parents carried their strong involvement in Head Start into public schooling.

Television

To warn about the effects of television upon literacy is nothing new. The comment of one Missouri teacher to the Council reflects the concerns of most educators: "The majority of the 7th graders I teach do not read on their own. . . . Our society makes everything readily available to them by switching on a TV. They are entertained, informed and even baby-sat by this machine." Many fear television produces passive spectators increasingly unable to sustain the concentration necessary for reading.

On the other hand, the high quality of programs presented on public television, Sesame Street in particular, demonstrates the medium's potential for challenging and informing adults and children alike. In her recent report, Humanities in America, Lynne Cheney, chair of the National Endowment for the Humanities, points to television as a "potent force available for rescuing" quality books such as West with the Night and Brideshead Revisited. When television adaptations aired, sales of both books increased dramatically.

The Council concludes that television can be a force for promoting education and literacy but only if used very selectively, especially among preschool children.

The Council concludes that television can be a force for promoting education and literacy but only if used very selectively, especially among preschool children. Parents should not use television to baby-sit or pacify children but to complement children's education with high-quality programs that stir the imagination and encourage exploration beyond the TV.

Libraries

The public library is an important educational and cultural resource in our communities. The Council applauds the efforts of those libraries which are promoting reading and providing outstanding activities for parents and preschool children. Libraries have also served as sites for literacy tutoring and Adult Basic Education classes

and are the source for materials used in these programs.

Libraries contribute to learning from birth to adulthood by providing services, programs, and materials to inform parents of the complexities of raising children; by providing read-aloud books, educational toys, and in-library activities; by providing materials for activities outside the library (i.e., day care); by providing, where they are essential, multi-language collections for parents and preschoolers; and by providing materials and programs to aid in literacy education, including technology and culture.

Libraries contribute to learning from birth to adulthood

In Realities: Educational Reform in a Learning Society,[5] the American Library Association's response to A Nation at Risk: The Imperative for Educational Reform, the library community describes its role in lifelong learning, specifically addressing the issue of literacy. The Council finds support in Realities for its Action Plans dealing with libraries: Action Plans 6, 23, and 24.

> **Action Plan 6: State agencies which have responsibility for preschool child-care services should encourage the use of book and library resources as part of the basic program requirements.**
>
> In addition, school superintendents, school boards, parents, and teachers in every community should prepare plans for developing school library resources, for using these resources effectively, and for coordinating services with public libraries in the community.

THE SCHOOL YEARS: Preparing Our Students for the 21st Century

The people of Missouri should focus on keeping our students in school and ensuring that their education prepares them for their adult years.

Families, neighborhoods, and communities play a vital role in the education process. Speaking at Missouri Youth 2000, Dr. Thomas Sticht stated that money spent on new parents and young adults (future parents) performs a "double duty"-helping the parents as well as their children. Sticht stressed research showing that education is a social function, dependent on family, neighborhood, and community involvement. According to Sticht, human potential is not determined by biological makeup, it lies in social interaction. With-

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out support outside the school doors, education is difficult if not impossible. When preschool programs such as Head Start do not show long-term benefits, it is because of a lack of social support and the inability of the schools to offset this deficiency with continuing effective programs.[1] Gordon Berlin and Andrew Sum, in Toward a More Perfect Union: Basic Skills, Poor Families, and Our Economic Future add evidence to the need for the valuing of education outside of school:

> When school is in session, advantaged and disadvantaged children learn at about the same rate. But during the summer months when schools are closed, home and peer influences reassert themselves. At the end of the summer, advantaged children actually score higher on a standardized test than they did when the summer started while disadvantaged children fall further behind.[2]

At-Risk Missourians

For many Missourians, the years before formal schooling are years of preparation with parental support. Formal schooling then prepares them for lifelong learning and future success. From this point they can in turn contribute to the preparation of the next generation. In The Forgotten Half: Non-College Youth in America, the William T. Grant Foundation Commission on Work, Family and Citizenship writes about the "interdependence," not total independence or dependence, that is a sign of effective participation in a community. Interdependence means both receiving and giving support.[3]

But for other Missourians, this cycle of interdependence is broken. Though completion of this cycle is not a recipe for success, nor non-completion a recipe for failure, those who miss out on the benefits of this preparation are "at-risk." At-risk Missourians are caught in a cycle where the results of problems become the causes for further problems.

As jobs become more complex and more service oriented, society becomes less able to accommodate an unskilled workforce.

The largest aspect of involvement by our society in this preparation is formal schooling. But increasingly, public and private schools are being asked to do more and more. As jobs become more complex and more service oriented, society becomes less able to accommodate an unskilled workforce. Young and uneducated potential workers cannot step easily into the new jobs; therefore, we have called on our schools to fill these economic and social gaps-by training our youth

for future jobs and by occupying their time until they are prepared for entrance into the workforce. The deterioration of the family structure also adds to the school's responsibility for socialization.

Although no segment of society has a greater opportunity to acquire literacy skills than elementary- and secondary-school students, an alarming percentage drop out and forego the opportunity to acquire the skills necessary to function as interdependent, productive, and informed members of society. Although a majority do graduate, many graduates do not have the basic skills which the granting of a high-school diploma implies.

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Even for those students attending school, a fulltime commitment to formal education is not always a priority. Sixty-three percent of all seniors are employed part time, 42% of sophomores.[4] Working up to fourteen hours per week has little effect on dropping out, but fifteen to twenty-one hours per week raises the dropout rate by 50%. More than twenty-one hours of work per week raises the risk by 100%.[5] Also, under current attendance policies, the average American student is absent nearly twenty days per year.[6]

When schools cannot adequately fill the gaps between dependence and interdependence, they fail the expectations of students, parents, and the public. And when students drop out, and parents and the public lose interest, they fail the expectations of the schools.

The following findings of the Council are based on many sources including three surveys designed and administered by the Council (one to essentially all public and private elementary- and secondary-school administrators in Missouri, one to a substantial number of teachers, and one to members of the Associated Industries of Missouri), and presentations to the Council by professionals principally from DESE.

Attaining Literacy

The majority of Missourians learn how to read and write early on in life, and their communication skills continue to develop as they grow older. But this does not happen for <u>all</u> Missourians. Even for those who complete high school, literacy levels acceptable to many employers are not guaranteed.

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"Credential inflation" is one reason for the present and projected

school-to-work problems. During the years when the baby boomers became eligible for the job market, the growth in available workers allowed employers to be more discriminating. Thus, they could upgrade qualifications and value attainment (grade completed) over achievement (test scores). Now, credential inflation cannot cope with the smaller workforce.[7]

Though today a higher number of high schoolers go on to college, this leaves fewer high-school graduates with good skills to enter the workforce. Recent efforts to improve the quality of graduates have focused almost exclusively on the college-bound, guided by the incorrect belief that a certain percentage of our young are predestined to failure.[8] This adds to the growing split between the upper and lower classes.

Special efforts must be made to improve education for students at the bottom of the academic scale as well as at the top. While the best students are getting better, at-risk and disadvantaged students are failing.

Special efforts must be made to improve education for students at the bottom of the academic scale as well as at the top. While the best students are getting better, at-risk and disadvantaged students are failing. Not all students learn alike, and educators need to be willing to accommodate different learning styles. Currently, most schools teach reading and writing skills using basal-reader programs. Basal-reader programs use a prescribed series of books, often in conjunction with workbooks, worksheets, flash cards, and tests. Most basal-reading series reflect an approach to learning based on discrete skills, which is counter to much of the current research and theory which favors learning from reading meaningful works in their entirety.

A rising body of research in Western nations identifies difficulty with phoneme segmentation as a primary cause of reading/spelling problems at all age levels. This difficulty in recognizing and comparing sound segments and their order within words has been found to place more than 25% of the population at-risk for attaining literacy.

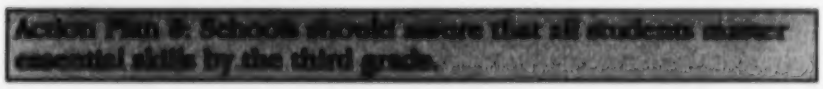
While the basal-reader/discrete-skills approach works for some, it does not work for all. Requiring such materials and methods limits the teacher's ability to adapt to individual students' learning styles. The National Council of Teachers of English (NCTE) Commission on Reading has issued a statement opposing basal reading systems. NCTE reports,

Literacy levels of American youth would rise if students, from first grade on, were allowed to spend plenty of time reading good books.

> Literacy levels of American youth would rise if students, from first grade on, were allowed to spend plenty of time reading good books. But to make such reading possible, the

dominance of basal reading systems in American classrooms must be broken.[9]

Educators need to be involved in an atmosphere of healthy debate, with the outcome being a balance of sound educational practices. This can only occur when all educators are open to ideas, both old and new, and they are allowed to pursue alternatives.



There are a variety of strategies which could be employed to help students master essential skills by the third grade. Two which should be studied for Missouri are all-day kindergarten and smaller pupil-adult ratios in grades K-3.

Remediation

If children having difficulty with basic skills are detected early, their chances of continuing to graduation are greatly enhanced. Teachers have the greatest exposure to children and, accordingly, the best opportunity to detect problems. They should be trained not only to detect deficiencies in basic skills, but also to spot DESE's 16 warning signs of dropping out.[10]

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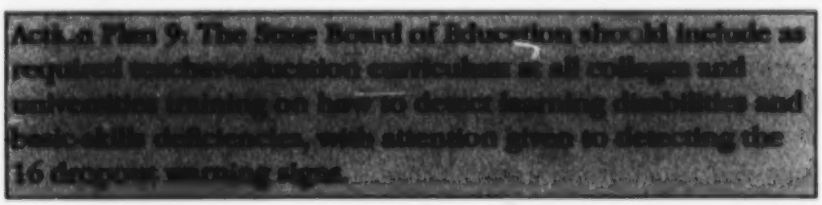


This training should not require added courses, but rather should be included in the existing courses now necessary for teacher certification.

DESE and/or professional teachers associations such as MSTA,

NEA, and AFTA should be encouraged to reinforce the proposed formal training by sponsoring continuing-education workshops.

The Council believes DESE should continue to require school districts to implement the Missouri Mastery Achievement Tests (MMAT) to all second graders to detect children at risk because of basic skills deficiencies. But early detection is of no value unless immediate remedial efforts are taken. Only remediation can prevent the cycle of failure and low self-esteem which the Teacher's Survey reported as the major problem of at-risk students. Though Missouri's teachers recognize the need for providing individual instruction, tutoring, and remedial instruction, a majority responded that there are inadequate funds for implementing programs for at-risk students. The importance of remediation is recognized by DESE, which currently administers a program of grants for compensatory or remedial education.[11]

Though Missouri's teachers recognize the need for providing individual instruction, tutoring, and remedial instruction, a majority responded that there are inadequate funds for implementing programs for at-risk students.

If two aspects of oral language are processed well, children have a conceptual base for understanding that language can be put into a written form to be read and comprehended. These two aspects of language processing can be stimulated for a preventive approach to literacy problems. In attaining literacy to their full potential, children need a conscious awareness of the phonology of language so they can segment sounds in words and can think and reason about how to decode words and spell. They also need to be able to turn words into mental images so they can gather meaning from language, draw conclusions, and make inferences. Clinical and classroom research indicate that providing stimulation for children in these two areas of perceptual-cognitive processing enhances all children's attainment of literacy.

In keeping with this emphasis on quality remediation, the National Association of State Boards of Education, in Right from the Start: The Report of the NASBE Task Force on Early Childhood Education stresses that early education efforts (1) must not focus solely on "standardized tests, worksheets and workbooks, ability grouping, retention and other practices that focus on academic skills too early and in inappropriate ways," (2) must take into account the individual child's development, so as not to "undermine a child's disposition to use these skills over the long term," and (3) must not produce "short-term, trivial results rather than developing long-term intellectual and social capacity."[12]

Action Plan 10: The Department of Elementary and Secondary Education should implement its strategy (stated in "The Missouri Plan for Literacy Advancement"[13]) of revising the school approval process to require districts to implement immediate remedial intervention strategies for at-risk students, with the goal being to reduce the state dropout rate.

Over five years, the goal would be to increase the current persistence-to-graduation rate (75%) to 85%.

Family involvement is another vital aspect of student success, and parents need to take an active part in their children's future. Parents can play a strong role in motivating their children to better their educational standing.

At-Risk Parents and Children

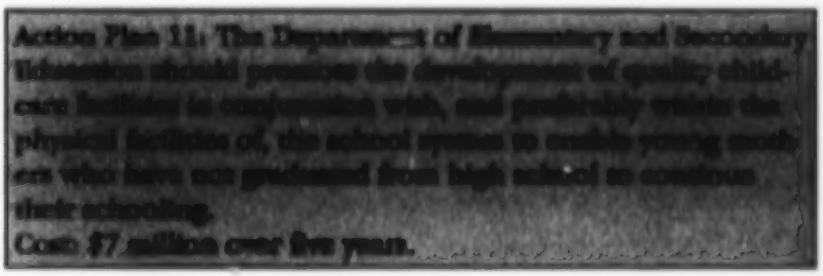
One population that shows a high risk for dropping out are pregnant teenage girls--80% drop out, as compared to 10% for girls who are not pregnant. Teasing from classmates is often a factor in a pregnant teenager's leaving school, especially when the pregnancy occurs outside of marriage.[14] Later, after the baby is born, childcare during school hours is a major concern.

One population that shows a high risk for dropping out are pregnant teenage girls—80% drop out, as compared to 10% for girls who are not pregnant.

About two thirds of the babies born to teenage mothers in St. Louis in 1983 were born out of wedlock. In St. Louis City and St. Louis County, between 1973 and 1983, the total number of out-of-wedlock births rose by 27% for nonwhite mothers, while the number for white mothers rose by 75%.[15] According to Ruth Rosauer of the Education Commission of the States, academic success is also involved. Compared to girls performing at or above grade level in school, the pregnancy rate for girls with "poor basic skills" is five times as high.[16]

Mothers unaware of correct prenatal-care procedures are at risk of producing low-birthweight babies, which can affect the children's later development. Also, children born to single teenage parents who have not acquired basic skills become at risk of not succeeding in the school system themselves. Most enter school behind their peers who have better at-home opportunities. These examples of the at-risk cycle are documented in Two Generations At Risk, the 1987 report of the Missouri Governor's Interagency Working Group on Adolescent Pregnancy.

The school system can address both the rising incidence of teen pregnancy and the dropping out that results. Family-planning education-pregnancy-prevention programs in the school-and programs to encourage pregnant teens and teen mothers to stay in school could significantly reduce the dropout rate and the cycle of dependency and poverty. DESE should strongly support the development of pregnancy-prevention programs for the middle grades-programs which emphasize the available options other than early parenting or abortion.



The Council encourages schools to emulate child-care programs already in place in Missouri: For example, a Springfield high school provides on-site child-care for teen mothers still in school; an Independence high school provides before-school and after-school services.

Some causes of dropping out amount simply to students disliking school. This dislike is often caused by poor performance or parents who do not value education. Poor performance leads to retention, "over age," failure, low self-esteem, and difficulty with teachers and administrators, all of which lead to dropping out. Low self-esteem can in turn lead to teenage pregnancy, continued academic failure, and many other problems. Programs that foster improved parental attitudes toward school and improved student performance could lessen many of these problems and reduce the dropout rate.

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The Committee joins the Children's Defense Fund in commending St. Louis's Teen Outreach Program, collaborating with the Junior League, which provides after-school sessions focused on building self esteem and, therefore, reducing teenage pregnancies and dropping out. They also place teens as volunteers in community agencies, giving them an active role in their community.[17]

The fact that children growing up in impoverished conditions often enter school with biological and psychological impairments contrib-

utes to the problems listed above and therefore to dropping out. Teen Parents as Teachers (TAMOS) is a branch of PAT directly involved with teenage parents. Like PAT, TAMOS carries out the normal role of educating parents for child raising while also helping young parents continue their growth and education.

The cost of educational failure is highest for those Missourians directly involved, but eventually everyone pays. The Forgotten Half reports that the losses for the 973,000 dropouts nationwide from the class of 1981 have been estimated at $228 billion from missed job opportunities. The cost to society will be a loss of $68.4 billion in taxes. In answer to these projected losses, the Committee for Economic Development states, "Every $1 spent on early prevention and intervention can save $4.74 in the costs of remedial education, welfare, and crime further down the road."[18] But these figures from the Committee for Economic Development came from a program which spent $6,187 per pupil, nearly twice that spent on Head Start.[19] Clearly, preventing later costs requires adequate spending early on.

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English as a Second Language

Missouri residents whose native language is one other than English face increased obstacles to literacy. The latest US Census data indicate that Missouri ranks 21st in the nation in the number of people who live in a household where a non-English language is spoken. Over 16,000 are children under the age of 5, over 24,000 are 5-17 years of age, and over 115,000 are 18 and older. Data from DESE indicate that minimally over 3,000 school-aged children are "limited English proficient" (LEP). That is, they are children whose first language is other than English and who are performing below their peers in school. They are found in 1 in 5 of Missouri school districts and come from over 60 language backgrounds.

The US census data indicated that among adults 16 years and older, over 6,300 persons were reported as speaking English not well or not at all. Of those respondents 25 years or older who identified themselves as Asian, American Indian, or of Spanish origin, 11,500 reported that they had completed eight or less years of school.[20] Many of these respondents would be functionally illiterate in today's society. National data collected by the Bureau of the Census in 1986 showed that 22% of the 17 to 21 million people in the US without literacy skills are Spanish-speaking residents and 15% are persons who speak some other non-English language.[21] Nationwide dropout

data from the same source in 1985 indicated that for Hispanic students from 16 to 17 years of age the dropout rate doubled that of the total population: 14.5% compared to 7%. These statistics indicate that LEP students do experience difficulties in school when faced with the dual task of learning a new language and achieving success in such academic skill areas as reading, writing, mathematics, and science.

Rough numbers gathered from ABE programs in the St. Louis Metro area indicate a current foreign-language population in excess of 5,000 receiving services annually--not counting those in volunteer, church, and worksite programs.

Because special instructional methods and materials are often needed to promote language learning and literacy development in English for Speakers of Other Languages (ESOL) students and adult learners, it is vital that teachers of these students be offered the appropriate, specialized training they need through the state's teacher education institutes and that these teachers receive credit for this training within the state's certification system-both for elementary-secondary teachers as well as adult educators.

Action Plan 12: An English as a Second Language component should be made available for the certification of Missouri ESL teachers.

At present, certification endorsements for English as a Second Language (ESL) are not provided. Thus, little encouragement is given for students desiring additional training in English as a Second Language. The availability of an endorsement in no way requires all educators to have ESL training, but it would provide support for existing programs and ensure an education for a population of students. At the same time, an endorsement sets up the machinery for establishing more complete ESL programs.

ESL programs for adults face the same problems as their ABE counterparts, with low funding being one of the most prominent.

ESL programs for adults face the same problems as their ABE counterparts, with low funding being one of the most prominent. Teaching ESL holds many challenges, and the Council commends those universities and colleges offering coursework in ESL instruction (Central Missouri State University offers a Master's Degree program). The Council also encourages those persons across the state working with programs dealing with first-language literacy acquisition for ESL students.

The Executive Summary of the Report on the greater Kansas City Hispanic Needs Assessment gives the results of a survey of Hispanics and agencies serving Hispanics in the Kansas City metropolitan area. Hispanics make up 2.4% of the population of the seven county area (in Missouri and Kansas). The following summarized responses share many of the same concerns cited elsewhere in this report:

* Education is a key determinant of future progress.

* Teenage pregnancy and alcohol and drug abuse are considered major community problems and the reasons that many drop out of school. Services addressing these problems need to be expanded.

* Residents tend to see community problems as caused by themselves and their community, rather than simply caused by service institutions.

* The Hispanic community is concerned about high unemployment among youth and adults.

* There is a shortage of low-cost day care.

* Single-parent families, women, elderly living with children, veterans, and youth 16-21 are poorly served.

* Hispanic leaders believe that limited education/literacy are a major cause of low rates of voter participation.[22]

Businesses and Schools

A survey of the senior executives of the Fortune 500 industrial and Fortune 500 service companies gives the following criticisms of the public education system:

* Executives give the US public education system an average grade of C-; 77% rate the system "fair" or "poor," the two lowest ratings on a five-point scale.

* 96% think the public school system represents a problem for the nation; 48% rate it "a very big problem."

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* 58% say their companies have difficulty hiring new employees with good basic skills; 51% predict it will become more difficult in the next ten years.

But these executives also believe they can be part of the solution:

* 96% say they are now making efforts to improve public schooling; 91% are currently giving money to schools.

* 69% report that their companies are willing to do more to help the education system; 68% of corporate executives say they would be personally willing to give time to education, if asked.

* 36% are currently providing remedial basic-skills courses; 28% say they would be willing to do so in the future.[23]

Businesses have the opportunity to provide both public and private schools with the added resources and personnel that schools need to better educate their students. One way to inform business of school's needs is through regional roundtables. Regional roundtables would provide a much needed forum for communication between business and education. Business leaders would learn about the real world of schools, and educators would learn what skills and abilities are prized by the business community.

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Action Plan 13: The Department of Elementary and Secondary Education should establish regional roundtables to foster stronger partnerships between schools and businesses.

The business sector can be involved in education in the same ways as other community members, but business has advantages that others often do not. Businesses can, in the forum of public education, share their expertise with students who often cannot see the relationship between school and the working world. And businesses can invest in educational programs, activities, and materials that improve the education of students and prepare them for more effective involvement in their society.

Business partnerships with schools are an excellent means of sharing resources. Two innovators in this area include Ewing Kauffman, founder of Marion Laboratories and co-owner of the Kansas City Royals, and Gerald Greenwald, former St. Louisan and current president of the Chrysler Corporation. Both Kauffman and Greenwald

have adopted a high school and promised students who graduate and meet other criteria a free college education. Kauffman works with Westport High School in Kansas City and Greenwald with University High School in St. Louis.

Encouraging work is already being done in the area of partnerships, but the possibilities for business's role in education is limited only by the imagination of those willing to contribute.

Action Plan 14: Businesses should cooperate with schools by providing money and expertise and should hold schools accountable in ongoing business/school partnerships.

Businesses and other workplaces must adopt policies that uphold the value of education and promote employees' involvement in their children's education. Establishing an ethos promoting education can take a number of forms: allowing leave for parents to participate in school activities and teacher-parent conferences; encouraging employees to run for school boards; upholding the academic achievements of employees' children; sponsoring brown-bag lunches with educators and other professionals concerned with children's development; and involving employees in volunteer activities on behalf of schools and preschool programs.

The Council applauds the following business/education efforts-just a few examples of what can be done.

* Fenton-based Maritz Inc., the largest producer and marketer of corporate motivational programs in the US, pledged up to $1 million a year for use in the St. Louis school district to improve school attendance. Maritz says, "If you're not there, it doesn't matter how good the instruction, how good the facilities are or how good the textbooks are. You've got to be present."[24]

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* In Tucson, Arizona, the owner of a drive-in restaurant gives a bonus to his teen-age employees for good grades: 15 cents an hour for a 2.5 grade-point average (GPA) and 25 cents an hour for a 3.0 or higher GPA.[25]

* Newspapers in Education Week is a permanent service of many newspapers to work with schools in promoting literacy. By using newspapers in the classroom, students can improve

Newspapers in Education Week is a permanent service of many newspapers to work with schools in promoting literacy.

reading, analytical, and interpretive skills, as well as become better acquainted with current events.

The Council strongly believes that resources are currently available, but woeful lack of communication has prevented business/school partnership from flowering.

Dropping Out

School completion rates are lowest in inner-city areas, where there is a high concentration of minorities and poverty-level families. Though being a minority and being poor often go hand in hand, it is poverty, not race, that is the most common factor in dropping out.

School completion rates are lowest in inner-city areas, where there is a high concentration of minorities and poverty-level families. Though being a minority and being poor often go hand in hand, it is poverty, not race, that is the most common factor in dropping out. A 1977 comparison of 14- to 17-year-olds from families with incomes less than $10,000 showed that rates of nonenrollment were nearly twice as high for whites as they were for blacks.[26]

Poverty, to which poor basic skills contribute, contributes in turn to the occurrence of single-parent families. A mother or expectant mother without a job is less likely to marry a man who cannot support her, and men are less likely to marry when they do not earn enough money. Of the children in single-parent households, two-thirds will spend almost that entire childhood in poverty.[27] And when those in poverty areas (i.e., the inner city) do rise above the poverty level, they tend to move away from those areas, leaving the community without models of success, suitable spouses, and economic improvement.

Much has been written on the symptoms and causes of dropping out of school, and surveys and questionnaires have been administered to many concerned audiences. But because the varied structures of past surveys and questionnaires lead to incomparable responses, it is impossible to list causes in order of priority with any certainty. One questionnaire lists "marriage" and "pregnancy" as different reasons for dropping out; another combines the two in a single category; and yet another lists "child care problems" as a separate category.

Nonetheless, those who study this question consistently perceive that the most frequent causes are encompassed by three categories: economic, school related, and personal.

Nonetheless, those who study this question consistently perceive that the most frequent causes are encompassed by three categories: economic, school related, and personal. Responses to both the Administrator's Survey and the Teacher's Survey list the major reasons for student dropout as

* Lack of parental support/low socio-economic background/ education not valued.

* Lack of achievement/lack of academic success.

* Lack of interest/no initiative.

All three of these responses are consistent with poor student performance and student dislike of school, a principle cause for dropping out.

The Council believes that so many solutions and programs have been advanced for solving the dropout problem that primary attention should be directed to selecting and implementing the most effective existing programs. Because there is and will continue to be a finite set of resources to apply to the problem, available resources should be directed to programs addressing the most prevalent causes of dropping out in proportion to the extent of the problem at each school and school district.

Because students drop out for many reasons, an effective dropout program requires a cohesive, integrated effort combining many components and addressing many problems.

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Action Plan 15: The State Legislature should promote innovative means to keep students from leaving school before graduation, such as alternative schools, the proposed raising of the driving age to 18 for those who drop out of school, and the increasing and decreasing of AFDC payments to families based on their childrens' school attendance and academic performance. Cost: $2.5 million over five years

Resources indicate that alternative schools which address the strengths of at-risk students and offer them another opportunity to earn a high-school diploma can help solve the dropout problem. DESE should help school districts develop alternative programs. The solution for many students who do not succeed in traditional schooling is not more of the same but an alternative.

West Virginia enacted a provision in 1988 that denies a driver's license to anyone under 18 who has not graduated or who has dropped out of school. A large majority of the public in West Virginia is in favor of the legislation and it has recently

been upheld in the courts--and school districts are reporting substantial increases in attendance rates. The resulting message is "School is important."[28]

One example of a higher-learning institution lending help to secondary schools is the Bridge Program, part of the University of Missouri-St. Louis's Partnerships for Progress initiative. Since it began in 1986, the Bridge Program has served over 1,800 students-providing tutoring, mentoring, and curriculum enrichment for high-school students during the school year; a Saturday math/science academy; advanced credit courses; a summer program that provides instruction and part-time jobs; and services for middle schools through the Access to Success extension.

Graduating

The Council believes a recipient of a high-school diploma should as a minimum have acquired the basic skills necessary for most entry-level jobs.

The Council believes a recipient of a high-school diploma should as a minumum have acquired the basic skills necessary for most entry-level jobs. However, five percent of respondents to the Business Survey said a high-school diploma is of "no value" as evidence that a graduate has these necessary basic skills and 58% said it was only of "some value." The high-school diploma is cheapened by being awarded to virtually everyone without regard to basic-skill attainment.

Seventy-nine percent of respondents to the Business Survey believe a standard test could be developed which would accurately test basic skills.

But can the attainment of basic skills be measured? Seventy-nine percent of respondents to the Business Survey believe a standard test could be developed which would accurately test basic skills. Preferably, levels of competency measured by such a test should be tied to the minimum requirements of jobs in the near future.

The Council supports awarding a certification on the diploma that indicates which students have passed such a competency test. It is important that a distinction be made between graduates so that the school system is not responsible for perpetrating a fraud by misrepresenting to society as a whole and employers in particular that all recipients of a diploma have the necessary skills.

DESE should develop a set of competencies needed by students to enter Missouri's workforce along with developing the means to measure these competencies. While this measurement might take the form of a test, other means should be explored.

Action Plan 16: School districts should administer a competency test in the 12th grade and award to those students passing the test a special certification on their diploma.
Cost: $.5 million over five years

To accompany this competency testing, further prevention programs focusing on basic skills should be developed well before testing time.

The Council is concerned, though, that those who fail the competency test would be branded and placed at a significant disadvantage in coping in the job market and in coping with life in general. However, the Council believes that the positive aspects of such a program would outweigh the negative and would more honestly represent student skill levels to society. This program would clearly identify students who do acquire necessary basic skills and, therefore, motivate some students to acquire the basic skills required to receive competency certification.

The Council realizes that minimum-competency testing can itself create a new reason for dropping out. This would call for dropout prevention programs emphasizing remediation in basic skills as well as those focusing on emotional and psychological factors. Competency testing cannot be utilized without the appropriate means to help students pass the test, and efforts at remediation must take place throughout a student's education. Though the Council realizes that further testing takes away classroom time and can produce "teaching to the test," the Council believes that a minimum-competency test would help to ensure the education of high-school graduates.

The cycle of disadvantage <u>can</u> be broken. Each year Missouri produces first-generation college graduates. The Council is optimistic that the same steps forward can be made in all areas of education.

Catching Dropouts

There is a lack of consensus on how to define a dropout and, consequently, on how to measure the number of dropouts. But even though statistics from different states and school districts within a state are not necessarily comparable, the most frequently quoted dropout rate for the nation is 25%. Data from Missouri is substantially the same, although the rates vary significantly from county to county. But even with inconsistencies in statistics, the evidence is

. . . the most frequently quoted dropout rate for the nation is 25%. Data from Missouri is substantially the same,

overwhelming that the dropout rate is too high and poses a serious problem for Missouri. Attention and resources need to be focused on school districts and schools with the greatest dropout rates and the programs seeking to alleviate the problem need to be evaluated. In order to do this, and to compare Missouri figures to national data, a uniform and accurate system of calculating the dropout rate must be used in all schools and school districts in Missouri.

Action Plan 17: The Department of Elementary and Secondary Education should mandate in Missouri's schools the dropout definition which states that dropouts are "persons neither enrolled in school or high school graduates." When a student disenrolls and does not request records within the first 20 days of the following quarter, the school should consider the student a dropout. Also, schools and school districts should collect data on dropout rates from the seventh grade through graduation.

The above definition of a dropout (in quotes) has been adopted by the Current Population Survey (CPS) and is used by the U.S. Government Accounting Office.

The Council also urges those students who do drop out of traditional schooling to pursue a High School Equivalency Certificate through Adult Basic Education.

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Action Plan 18: School districts should report the names, mailing addresses, and telephone numbers to the Literacy Hotline or local Adult Basic Education centers of students who are 16 years of age or older and who drop out of school for any reason other than to attend another school, college, or university, or enlist in the armed services.

School districts should also have on hand information on all available literacy programs in their area and provide this information to students leaving school, giving students the opportunity to find the programs that best suit their needs.

The people of Missouri should provide opportunities for all our adults, especially those who are underskilled, to improve their literacy skills, life skills, and job skills.

Analysts agree that fundamental structural changes are taking place in the world and in America. And while they may become most evident in the workplace, they affect all aspects of our lives. The following trends appear relevant:

1. The global economy, which has virtually taken shape, will hasten the emergence of a global community characterized by expanded interaction across geographical and cultural boundaries not only in business but also in fields such as art, music, entertainment, and education. Understanding and coping with the impact of such increased communication will require a fairly sophisticated level of literacy.

2. Timely information will increasingly become the "capital" or "raw material" of economic activity. Therefore, the ability to receive and transmit such information in spoken, written, or numeric form will become critical.

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3. Technology will penetrate even deeper into our everyday life, becoming the driving force of economic activity. Being able to handle emerging technologies will require rather sophisticated levels of prose, document, and numeric literacy.

4. The rate of change in all areas of life, including the workplace, will accelerate. Those who have "learned how to learn" will be best equipped to react positively to rapid change. Since basic literacy skills are the fundamental tools employed by those who have learned how to learn, successfully adapting will require high-level literacy skills.

Those who have "learned how to learn" will be best equipped to react positively to rapid change.

Derek Bok, the president of Harvard University, sums up the challenge in his book, Higher Learning, and points out some of the directions for change:

> More and more, therefore, the United States will have to live by its wits, prospering or declining according to the capacity of its people to develop new ideas, to work with sophisticated

Of all our national assets, a trained intelligence and a capacity for innovation and discovery seem destined to be the most important.

technology, to create new products and imaginative new ways of solving problems. Of all our national assets, a trained intelligence and a capacity for innovation and discovery seem destined to be the most important.[1]

Meeting these challenges will not be easy. Twenty-two percent of Missouri's citizens 25 years or older have less than eight years of education--only eleven other states have higher averages. The US Council of State Planning Agencies reports that 75% of the nation's workforce for the next two to three decades is already in place. School reform and other projects focusing on young Missourians will not be able to reach most of the workers of the near future; therefore, expansion of ABE is necessary.

Adult Basic Education

Adult Basic Education (ABE) programs in Missouri serve nearly 30,000 adults yearly, and 13-15% of the people completing their high-school education each year do so by earning a High School Equivalency Certificate through ABE. ABE programs work with non-readers, low-level readers, and those who cannot understand what they've read even though they can decode the printed word. There is a great variety of grade levels among these adults-many have reached high school or even graduated. Some have learning disabilities. For some, English is a second language. ABE provides individualized instruction to help all students achieve their educational goals-for many this means passing GED testing to receive their High School Equivalency Certificate.

ABE literacy programming is neighborhood-based, having the qualities of availability (time) and accessibility (place). Calls and referrals are funneled through a statewide literacy hotline operating in conjunction with the Missouri Literacy database. During 1987-88, the hotline dealt with 2,278 calls and requests.

But the Council is very concerned that ABE is currently serving only 2% of the eligible population in Missouri. ABE coordinators continue to express the need for additional staffing to coordinate recruitment for a program that is often characterized as "the best kept secret."

Programs such as PAT and Head Start frequently identify candidates for ABE but report that external barriers such as transportation and child care often block even the most motivated adult. ABE has no

funding for child care, and the Division of Family Services has only limited funding to pay for child care for parents involved in GED classes.

Locations of ABE classes in schools also serve as an obstacle. It takes great courage for adults to return to the place where they failed as children and admit the need to learn basic skills. Those seeking basic-skills education must overcome the embarrassment, low self-image, and fear of failure that ABE students often carry. A simple change of sites could help potential students overcome the humiliation of having to enter the classroom again. Therefore, we support the efforts of community organizations such as libraries, churches, and businesses who donate their facilities for use by ABE programs or other literacy tutoring organizations.

Locations of ABE classes in schools also serve as an obstacle. It takes great courage for adults to return to the place where they failed as children and admit the need to learn basic skills.

A major barrier that ABE programs face is a lack of funds to meet the literacy needs of Missourians. Currently, there is only $4 of state and federal funding for each of the over 1,300,000 adult Missourians who, according to the 1980 census, did not complete their high-school education. This amount compares to $3,000 in funding for each public-school student and $18,000 for each prisoner in Missouri.

In fiscal year 1982, following a general yearly increase in total governmental funding, the amount of money allocated to Missouri's ABE program decreased. Over the next several years, as the funds continued to diminish, the number of adults served also declined. Then in 1986, the number served increased again because the money was once again available to serve those individuals-in part due to an increase in funding by the state, whose funding level had previously stayed unchanged from year to year. Such increases in money are very important and have proven very valuable in allowing ABE directors to serve more of the Missourians in need.

Currently, the funding for ABE programs is determined by the number of contact hours made with students in designated facilities. ABE receives about $2.00 per hour for each student (down from $2.25 in 1978). This lack of funding creates problems for those programs with few potential students and those with too many.

In sparsely populated rural areas, it is difficult to recruit sufficient numbers of students to make programs cost effective. In most rural programs, the ABE director teaches 30 or more hours each week and must perform secretarial duties for the program to survive. And the

programs still must seek additional sources of funding to supplement state and federal monies. In areas where students are plentiful, ABE programs do little or no advertising for fear that they would have to turn away students because there is not enough money to open new classes. And when recruits and community support are desired for any program, the sophisticated marketing approaches that are often necessary are too costly.

Because they are outside the social mainstream, too many Missourians miss the opportunities for improvement in which others are involved. Because they are not often seen, they are easily ignored.

Because they are outside the social mainstream, too many Missourians (for example, the poor of the inner cities and rural areas) miss the opportunities for improvement in which others are involved. Because they are not often seen, they are easily ignored.

Action Plan 19: The Department of Elementary and Secondary Education should develop and implement strategies to provide Adult Basic Education programs for all areas in Missouri not currently served.

The Council recognizes that there is no one model for meeting the diversity of needs in all of Missouri's communities. Skills centers can be housed in a variety of locations, from public schools to community colleges to businesses. All areas of Missouri should have a number of sites for teaching basic skills to provide alternatives for learners.

Lack of funding translates directly to low teacher pay. The pay scale for ABE teachers is 1/3 to 1/2 of what regular K-12 classroom teachers earn. Contract teachers are almost non-existent in ABE programs because of the high cost; therefore, most ABE teachers are part-time and paid by the hour, with few if any benefits, thus eliminating a strong core of professionals and attracting fewer highly qualified teachers. Also, non-contract positions and payment only for contact hours does not allow for the money or time needed for teachers to stay knowledgeable on current research and innovations or to develop their own.

Even the volunteers used in ABE programs are not free. During the 1987-88 school year, over $18,000 was spent on 36 volunteer-training workshops across the state. Obtaining good volunteers and training, organizing, supervising, and retaining them requires staff time and therefore costs money. When that support is unavailable or inadequate, the volunteers either leave the program or stay but do an inadequate job.

Action Plan 20: By 1995, the Iowa Legislature should increase funding five-fold and provide greater flexibility in funding for Adult Basic Education to reach 10% of the eligible population and to make classes more available.
Cost: $7 million over five years.

Increased funding for ABE would allow for higher teacher salaries, competitive contracts, better training for volunteers, better and more teaching materials, and up-to-date uses of modern technology. A number of educators feel that computer systems can play a significant role in future basic-skills training, allowing for increased use of group instruction.

Additional funds should also be earmarked for child care during classes, the use of mobile programs for rural areas, and additional recruiters for each regional center (at present, teachers are responsible for their own recruiting).

The federal government should rework its formula for funding ABE so that it rewards states, like Missouri, which go beyond the required matching of federal funds.

ABE and other service groups should standardize their definitions of contact hours, expanding their definitions to better compensate teachers for work done outside the classroom.

Jobs Skills and Business Involvement

One concern of the Council deals with the delivery systems currently in place for teaching job skills. Delivery systems will be most beneficial when they have the ability to focus on specific individuals and specific jobs. Skill centers may be the appropriate delivery system for the future, and community colleges may be the appropriate places for these centers. Skill centers would function as new strands in the educational system.

Deciding where the role of the public schools ends and where private industry should take over poses one problem.

Deciding where the role of the public schools ends and where private industry should take over poses one problem. Public schools should know the point where they've done enough, where everything else needed for employment is idiosyncratic-in other words, where industry needs to do its own training. The workers of the future are now in the school system, but there is also a huge number of workers already in the workforce who will never return to school.

The workers of the future are now in the school system, but there is also a huge number of workers already in the workforce who will never return to school.

These workers will continue to need education. Currently, each large employer provides an idiosyncratic system. If businesses contracted out needs to one program, they could both support the educational system and eliminate the redundant costs of each supporting an educational center.

A fully state-wide delivery system would aid in communication between business and learning centers, and in standardizing the methods of delivery which presently vary radically from community to community. A state-wide system would also help to consolidate spending. Material from the American Society for Training and Development suggests in four different reports that industry spends much more money on education than educational systems do. Any way to combine some of this spending, to make the systems more cost effective, would only improve the bottom line for major employers. A clearinghouse for teachers (including those now retired) who wish to work for industry to improve basic-skills training would help in the implementation of such systems.

Action Plan 21: Community colleges and four-year institutions should (1) focus additional resources on programs that meet the needs of adult learners, including the initiation of cooperative projects with industry, and (2) foster life-long learning through increased efforts at attracting adults to continuing-education programs.

The Council forsees an increasingly important role for community colleges in retraining workers for more sophisticated jobs.

The Council foresees an increasingly important role for community colleges in retraining workers for more sophisticated jobs. In short, a major goal of community colleges should be to jump into the business of promoting themselves as the training grounds for industry's needs.

Action Plan 22: The State Legislature should offer incentives for companies to upgrade existing employee basic skills. This may include tax credits for successful programs.

Libraries have a definite role in the literacy effort. Fully realizing this role calls both for better support of libraries and for opportunities for more library involvement in literacy programs.

Libraries

Libraries have a definite role in the literacy effort. Fully realizing this role calls both for better support of libraries and for opportunities for more library involvement in literacy programs.

Action Plan 23: Libraries should continue to assist in coordinating efforts with local literacy training and/or Adult Basic Education programs to provide better recruitment, alternate sites, and reading materials.

Action Plan 24: By 1995, the State Legislature should increase funding for libraries to (1) bring per-capita funding in Missouri up to the national average, (2) support the staffing needed to conduct activities in all libraries for pre-school children and to assist adult literacy programs, and (3) provide grant money for library service for those geographic areas not currently served.
Cost: $3 million over five years.

Libraries, with adequate funding, can provide services beyond their own walls to include hospitals, nursing homes, correctional facilities, and other institutions.

The Council applauds efforts to bring library users, librarians, and public officials together. A Governor's conference bringing these policy makers together would help assess the capacity of our libraries. Since the writing of the Council's Interem Report, the Governor has already deided to hold a conference in 1990, entitled the Governor's Conference on Library and Information Services, which will provide the forum for Missouri's contibution to the White House Conference on Library and Information Services to be held in 1991.

Another way of bringing officials together would be to include a position for a library specialist in DESE.

Volunteers

Though there is a shortage of volunteers for literacy tutoring, Missouri has the programs in place for increased volunteer involvement. Also, many resources for volunteers and other forms of support exist in Missouri's vast network of civic and professional organizations such as Retired Teachers and Junior League. Such community involvement brings the problem of literacy a little closer to home and, therefore, helps promote understanding and appreciation of the complexity of illiteracy.

Though there is a shortage of volunteers for literacy tutoring, Missouri has the programs in place for increased volunteer involvement.

The Council wants to encourage the voluntary spirit among young people. An exemplary project deserving replication currently oper-

ates through Rhodes College in Memphis, Tennessee. College students tutor 10th graders in the city schools, who tutor 7th graders, who tutor 4th graders. Such a program reveals the wisdom of giving students who are lagging behind academically a sense of accomplishment as they help the younger students. Just as important, the college students experience the problems of disadvantaged students first hand.

Missouri owes much to Laubach volunteers and other volunteers in the literacy effort. The approximately 2,100 volunteers currently tutoring over 2,300 students are providing an invaluable service in Missouri. If we use the very conservative figure of $5.00 per hour of one-on-one attention to estimate the money saved, these tutors provided $195,325 worth of service in the 1987-88 school year. And these figures reflect the activity of the 38 programs reporting to the Missouri Literacy Database--they do not include the unreported service hours generated by volunteers.

Action Plan 25: Civic, religious, and professional organizations should make literacy a top priority by encouraging their members to serve as volunteers and by directing their charitable giving to literacy organizations. Secondary schools, colleges and universities should provide incentives for students to volunteer for tutoring those in need.

The Council commends such fund-raising efforts as that of the Jaycees of Missouri who set up a roadblock on September 23 to collect money for LIFT-MO.

This recommendation is not made without a keen awareness that simply increasing the number of volunteers will not solve the problem. We know that literacy organizations desperately need more paid staff in order to coordinate and train volunteers.

Volunteers cannot solve the problem themselves, and volunteer organizations realize their limitations. One of the strengths of volunteer tutoring is one-on-one instruction, which provides the personal attention that adult students often need but have not previously received; but this limits the number of students that can be served. And sometimes even personal attention is not enough. Some educators estimate that as many as 90% of ABE students have learning disabilities or physical disabilities such as hearing and sight impairments. It is difficult for a volunteer with only 12 hours of training to

work through such problems.

To capitalize on their one-to-one tutoring methods, volunteer groups need to evaluate students prior to instruction and carefully match students to tutors, taking into consideration scheduling, common interests, and common experiences. Tutors should work first on the most pressing of student's needs and create individualized lesson plans. In this way, literacy should be seen in the context of each student's life, directly relating basic skills with economic, social, and political empowerment. When the student's goal is separated from the act of learning to read, that student can easily become discouraged and disinterested, losing motivation and giving up.

Teaching methods should also take individual students into account. Because many students have not acquired reading skills through traditional schooling and traditional methods, alternative methods of reading instruction should be utilized. A number of sources suggest that students benefit when ABE programs encourage the use of teaching methods other than phonics-based approaches.

Missouri cannot abandon its volunteers. Instead we must give them the support and information they need to do the best job of educating.

Community Analysis

The Council recognizes that each local community in Missouri has a unique set of problems and resources and, therefore, must analyze and address its own situation. Agencies and institutions concerned with literacy and education should collaborate on the development of guidelines to assist local communities with self assessment. The guidelines might direct communities on how to evaluate statistics on at-risk families, opportunities for preschool education and adult literacy training, and involvement of local businesses and community organizations.

The Council recognizes that each local community in Missouri has a unique set of problems and resources and, therefore, must analyze and address its own situation.

Cooperation would be easier if community agencies which provide similar or complimentary services shared the same physical facility. While this would be helpful throughout the state, it would be especially important in the areas where population is concentrated--where unemployment, welfare recipients, and lack of literacy skills are most prominent.

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Action Plan 26: State agencies that provide adults with training in literacy skills, basic skills, and job skills should be housed in the same physical facility at the local or regional level.

The one-stop convenience of these centers would help make agencies customer driven rather than bureaucracy driven.

Learnfare/Welfare-to-Work

The Council's primary goal for all Missourians is interdependence, but the current welfare system too often promotes dependence, and breaking out of the cycle of dependence is very difficult. One solution is Missouri's Learnfare/Welfare-to-Work program. The goals of the program are

1. to boost the educational level and job potential of AFDC parents who lack high-school diplomas by requiring registration in ABE/GED or equivalent high-school programs, exempting only those with preschool children or special hardships,

2. to open new job opportunities for AFDC parents through mandatory registration for job-skills, job-search, job-experience, and job-placement programs and through individually tailored guidance by assigned case managers,

3. to expand day care to help AFDC parents get maximum benefit from the new education and employment opportunities,

4. to provide a new Community Work Experience program to provide on-the-job work experience to those who are unsuccessful in the education, training, and job-search components of the program.

Action Plan 27: The State Legislature should fully implement Missouri's Learnfare/Welfare-to-Work program, along with the appropriate funding and evaluative procedures.
Cost: $14 million over five years.

The welfare system carries with it many controversies, and changes to that system are often controversial as well, but the Council believes that something must be done to improve the current situation. Missouri's Learnfare/Welfare-to-Work program is one means for improvement. We realize, though, that welfare reform legislation will fail in its goals if the appropriate funding and expertise is not pro-

vided. Evaluation, considering both the quantity and quality of education and work experiences, is also necessary to insure that this program does not simply prepare Missourians for dead-end, minimum-wage jobs, keeping them in dependent roles.

Education in the Prisons

After the at-risk cycle has already begun, remediation, rather than prevention, becomes necessary. And when people do not succeed, or when the regular channels are not accessible to them, there must be alternatives. One such group of those needing alternatives are Missouri's approximately 12,000 prisoners.

Eighty-five percent of the people in Missouri's prisons are not high-school graduates. Missouri inmates average 10.5 years of schooling, and forty percent of the inmates entering the corrections system have literacy skills at or below the 6th-grade level. While the Council acknowledges that a lack of literacy skills is only one of a complex array of disfunctions that lead to a life of crime, it is nonetheless a very important barrier to success in this society and plays a large part in a person's original entry into crime. Gaining basic skills can also play a critical role in rehabilitation.

Eighty-five percent of the people in Missouri's prisons are not high school graduates.

US statistics show that over 40% of the arrests made for serious crimes were of people under age 18.[2] In Missouri, as well as in the rest of the US, the high rate of criminal activity correlates with failure in school: without basic skills, dropouts often turn to illegal means for income.

In Missouri, as well as in the rest of the US, the high rate of criminal activity correlates with failure in school; without basic skills, dropouts often turn to illegal means for income.

Action Plan 28: By 1995, prison authorities should provide sufficient instruction so that 90% of those inmates categorized as functionally illiterate achieve an eighth-grade level of literacy before they are released from incarceration.
Cost: $2 million over five years

Since 40% of those interned each year in Missouri prisons are categorized as functionally illiterate, this goal means that in a given year 2,500 prisoners would need to receive instruction so that they can function at the eighth-grade level of literacy.

Action Plan 29: By the year 2000, capable inmates should be required to earn a High School Equivalency Certificate (GED) before they can be granted parole.

The GED would provide released inmates with more and better opportunities outside of prison and, therefore, should lessen the number of those who are repeat offenders and return to incarceration.

The Human Resources Development Council

The Council's final Action Plan encompasses the need for implementation of the Final Report and follow-up evaluation. It also moves Missouri closer to more comprehensively and effectively meeting the needs of all Missourians.

Eight state agencies and numerous private agencies provide or support literacy services to adult learners. It is impractical and impossible to create a new agency that would be the single provider of services to adults. Further, state government does not need an additional council or commission to oversee literacy services. However, Missouri would benefit from replacing the multiple councils that now oversee literacy services with one council to serve as one voice to advise the governor on the effective and efficient use of resources, programs, and services for Missourians in need. The federal government may soon require such a council by July 1990; therefore the Governor should precede the federal government's action and move in this direction immediately.

Action Plan 30: The Governor should create the Human Resources Development Council, replacing the current state councils related to Adult Basic Education, Vocational Education, Job Opportunities and Basic Skills, the Job Training and Partnership Act, and Employment Security. This one body would advise the Governor on a variety of programs serving Missourians.

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8. Ibid. 23, 55.

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